


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>							
<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER 14-7D-45 BTR							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT							
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME OF OPERATOR BILL BARRETT CORP						7. OPERATOR PHONE 303 312-8164							
8. ADDRESS OF OPERATOR 1099 18th Street Ste 2300, Denver, CO, 80202						9. OPERATOR E-MAIL BHilgers@billbarrettcorp.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 1420H626297			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Uintah and Ouray			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		533 FSL 1993 FWL		SESW		7		4.0 S		5.0 W		U	
Top of Uppermost Producing Zone		810 FSL 1981 FWL		SESW		7		4.0 S		5.0 W		U	
At Total Depth		810 FSL 1980 FWL		SESW		7		4.0 S		5.0 W		U	
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 810			23. NUMBER OF ACRES IN DRILLING UNIT 640							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2326			26. PROPOSED DEPTH MD: 8755 TVD: 8743							
27. ELEVATION - GROUND LEVEL 6284			28. BOND NUMBER LPM8874725			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-180							
<b>Hole, Casing, and Cement Information</b>													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight		
Cond	26	16	0 - 80	65.0	Unknown	8.8	Unknown		0	0.0	0.0		
Surf	12.25	9.625	0 - 2200	36.0	J-55 ST&C	8.8	Halliburton Light , Type Unknown		310	3.16	11.0		
							Halliburton Premium , Type Unknown		210	1.36	14.8		
Prod	8.75	5.5	0 - 8755	17.0	P-110 LT&C	9.7	Unknown		640	2.31	11.0		
							Unknown		860	1.42	13.5		
<b>ATTACHMENTS</b>													
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME Venessa Langmacher				TITLE Senior Permit Analyst				PHONE 303 312-8172					
SIGNATURE				DATE 02/08/2012				EMAIL vlangmacher@billbarrettcorp.com					
API NUMBER ASSIGNED 43013512220000				APPROVAL  Permit Manager									

**DRILLING PLAN**

BILL BARRETT CORPORATION

**14-7D-45 BTR Well Pad**

SE SW, 533' FSL and 1993' FWL, Section 7, T4S-R5W, USB&amp;M (surface hole)

SE SW, 810' FSL and 1980' FWL, Section 7, T4S-R5W, USB&amp;M (bottom hole)

Duchesne County, Utah

**1 - 2. Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals**

<b><u>Formation</u></b>	<b><u>Depth – MD</u></b>	<b><u>Depth – TVD</u></b>
Lower Green River*	4,356'	4,348'
Douglas Creek	5,229'	5,218'
Black Shale	6,060'	6,048'
Castle Peak	6,305'	6,293'
Uteland Butte	6,595'	6,583'
Wasatch*	6,825'	6,813'
TD	8,755'	8,743'

\*PROSPECTIVE PAY

The Wasatch and the Lower Green River are primary objectives for oil/gas.

Base of Useable Water = 5,500'

**3. BOP and Pressure Containment Data**

<b><u>Depth Intervals</u></b>	<b><u>BOP Equipment</u></b>
0 – 2,200'	No pressure control required
2,200' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b><u>Hole Size</u></b>	<b><u>SETTING DEPTH</u></b>		<b><u>Casing Size</u></b>	<b><u>Casing Weight</u></b>	<b><u>Casing Grade</u></b>	<b><u>Thread</u></b>	<b><u>Condition</u></b>
26"	Surface	80'	16"	65#			
12 1/4"	Surface	2,200'	9 5/8"	36#	J or K 55	BT&C	New
8 3/4"	Surface	TD	5 1/2"	17#	P-110	LT&C	New
<b>NOTE: In addition, 8 3/4" hole size may change to 7 7/8" at the point the bit is changed out.</b>							

Bill Barrett Corporation  
Drilling Program  
#14-7D-45 BTR  
Duchesne County, Utah

5. **Cementing Program**

<b>Casing</b>	<b>Cementing</b>
16" Conductor Casing	<i>Grout</i>
9 5/8" Surface Casing	<p><i>Lead</i> with approximately 310 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft<sup>3</sup>/sx) circulated to surface with 75% excess. Top of lead estimated at surface.</p> <p><i>Tail</i> with approximately 210 sx Halliburton Premium cement with additives mixed at 14.8 ppg (yield = 1.36 ft<sup>3</sup>/sx), calculated hole volume with 75% excess. Top of tail estimated at 1,700'.</p>
5 1/2" Production Casing	<p><i>Lead</i> with approximately 640 sx Tuned Light cement with additives, mixed at 11.0 ppg (yield = 2.31 ft<sup>3</sup>/sx,) . Top of lead estimated at 1,700'.</p> <p><i>Tail</i> with approximately 860 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft<sup>3</sup>/sx). Top of tail estimated at 5,560'.</p>

6. **Mud Program**

<b><u>Interval</u></b>	<b><u>Weight</u></b>	<b><u>Viscosity</u></b>	<b><u>Fluid Loss</u></b> <b><u>(API filtrate)</u></b>	<b><u>Remarks</u></b>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 2,200'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
2,200' – TD	8.6 – 9.7	42-52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

7. **Testing, Logging and Core Programs**

Cores	None anticipated
Testing	None anticipated; drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD as needed to land wellbore;
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface). FMI & Sonic Scanner to be run at geologist's discretion.

Bill Barrett Corporation  
Drilling Program  
#14-7D-45 BTR  
Duchesne County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4409 psi\* and maximum anticipated surface pressure equals approximately 2486 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

\*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

\*\*Maximum surface pressure = A – (0.22 x TD)

**9. Auxiliary Equipment**

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

**10. Location and Type of Water Supply**

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

**11. Drilling Schedule**

Location Construction:	June 2012
Spud:	June 2012
Duration:	15 days drilling time
	45 days completion time





# Bill Barrett Corporation

## LAKE CANYON & BLACK TAIL RIDGE CEMENT VOLUMES

**Well Name:** 14-7D-45 BTR

### Surface Hole Data:

Total Depth:	2,200'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	931.7	ft <sup>3</sup>
Lead Fill:	1,700'	
Tail Volume:	274.0	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

Lead Yield:	3.16	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Lead:	0'	

### Calculated # of Sacks:

# SK's Lead:	310
--------------	-----

Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	1,700'	

# SK's Tail:	210
--------------	-----

### Production Hole Data:

Total Depth:	8,755'
Top of Cement:	1,700'
Top of Tail:	5,560'
OD of Hole:	8.750"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1462.5	ft <sup>3</sup>
Lead Fill:	3,860'	
Tail Volume:	1210.7	ft <sup>3</sup>
Tail Fill:	3,195'	

### Cement Data:

Lead Yield:	2.31	ft <sup>3</sup> /sk
Tail Yield:	1.42	ft <sup>3</sup> /sk
% Excess:	50%	

### Calculated # of Sacks:

# SK's Lead:	640
# SK's Tail:	860

<b>14-7D-45 BTR Proposed Cementing Program</b>
------------------------------------------------

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (1700' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 1,700'
	Volume: 165.93 bbl
	<b>Proposed Sacks: 310 sks</b>
<b>Tail Cement - (TD - 1700')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 1,700'
	Calculated Fill: 500'
	Volume: 48.80 bbl
	<b>Proposed Sacks: 210 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (5560' - 1700')</b>	
Tuned Light <sup>TM</sup> System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 1,700'
	Calculated Fill: 3,860'
	Volume: 260.47 bbl
	<b>Proposed Sacks: 640 sks</b>
<b>Tail Cement - (8755' - 5560')</b>	
Econocem <sup>TM</sup> System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 5,560'
	Calculated Fill: 3,195'
	Volume: 215.61 bbl
	<b>Proposed Sacks: 860 sks</b>

## **PRESSURE CONTROL EQUIPMENT – Schematic Attached**

**A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer.** The blow out preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
4. 3-inch diameter choke line.
5. Two (2) choke line valves (3-inch minimum).
6. Kill line (2-inch minimum).
7. Two (2) chokes with one (1) remotely controlled from the rig floor.
8. Two (2) kill line valves, and a check valve (2-inch minimum).
9. Upper and lower kelly cock valves with handles available.
10. Safety valve(s) & subs to fit all drill string connections in use.
11. Inside BOP or float sub available.
12. Pressure gauge on choke manifold.
13. Fill-up line above the uppermost preventer.

**B. Pressure Rating:** 5,000 psi

### **C. Testing Procedure:**

#### Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition, the Annular Preventer will be functionally operated at least weekly.

#### Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be

maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

**D. Choke Manifold Equipment:**

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

**E. Accumulator:**

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in the *Onshore Oil & Gas Order Number 2*.

A manual locking device (i.e. hand wheels) or automatic locking device will be installed on all systems of 2M or greater. A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls for all 3M or greater systems will be capable of closing all preventers. Remote controls for 5M or greater systems will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

**F. Miscellaneous Information:**

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.

A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

T4S, R5W, U.S.B.&M.

BILL BARRETT CORPORATION

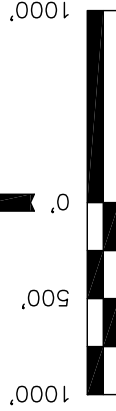
Well location, #14-7D-45 BTR, located as shown in the SE 1/4 SW 1/4 of Section 7, T4S, R5W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6097 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PROPERTY WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY CLOSE SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT L. KAY  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH  
05-04-11

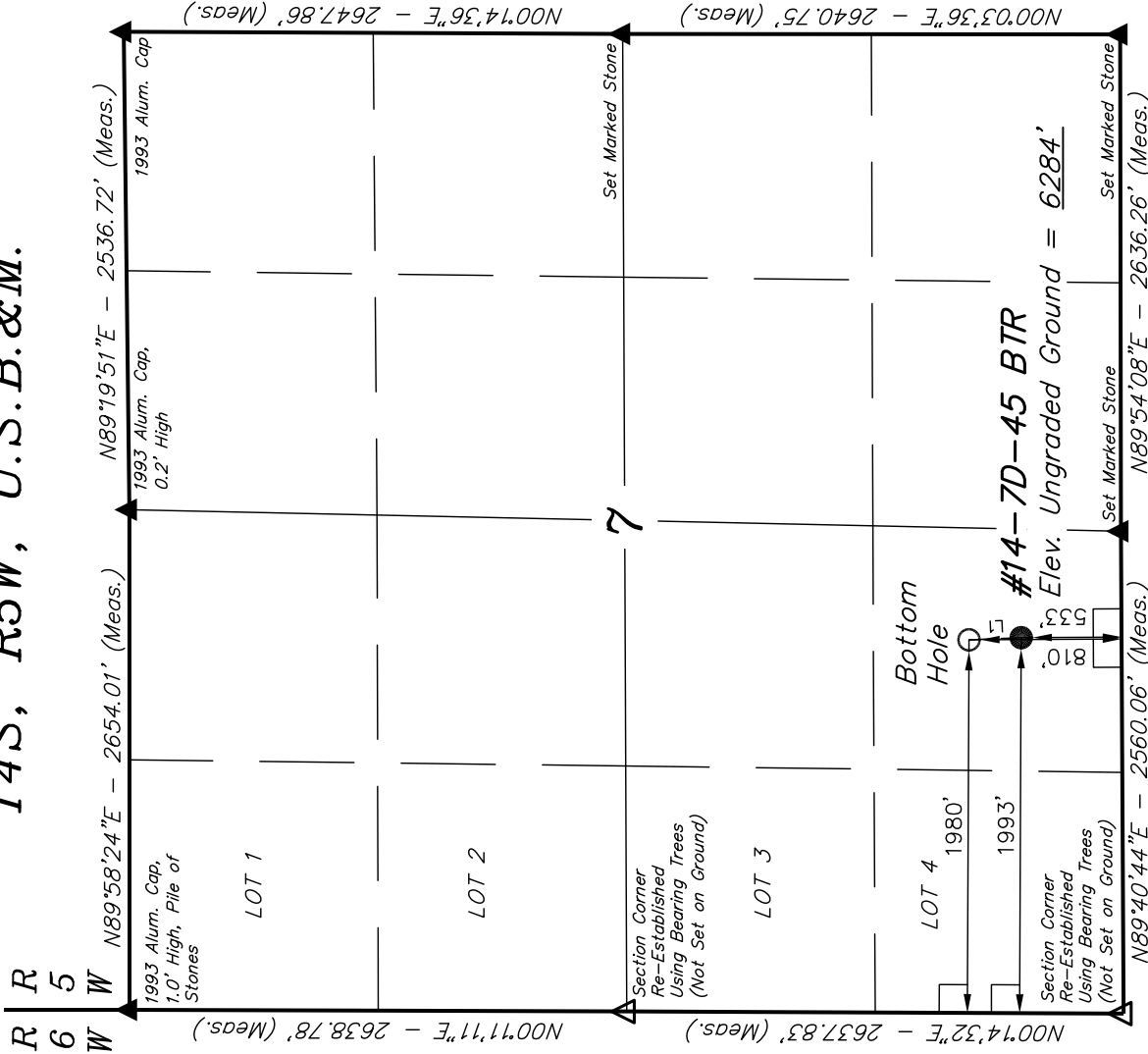
REVISED: 05-04-11

UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-11-10	DATE DRAWN: 12-16-10
PARTY D.R. J.T. S.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE	
		BILL BARRETT CORPORATION



LEGEND:

— = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

△ = SECTION CORNERS RE-ESTABLISHED.

(Not Set on Ground.)

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

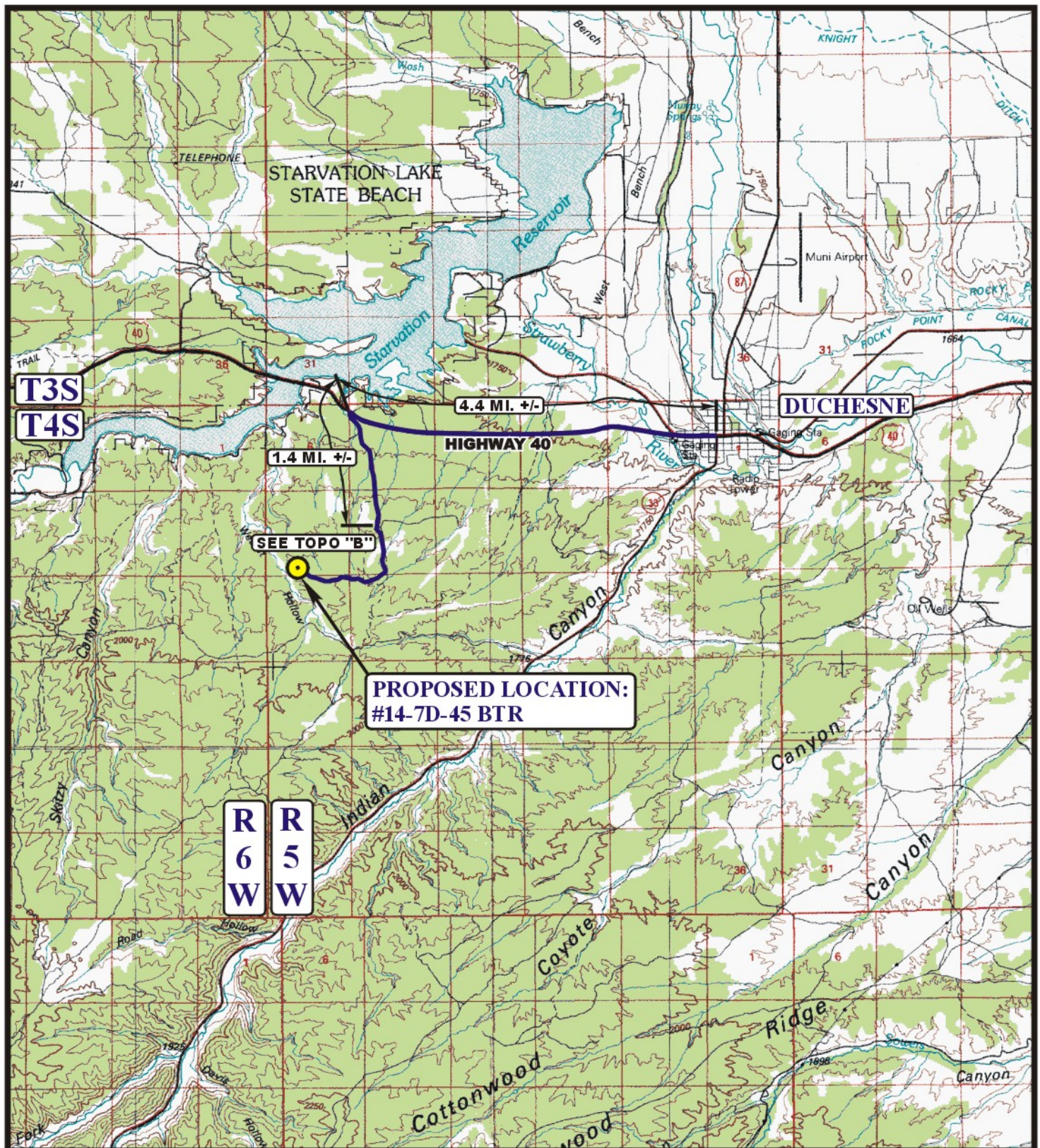
LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

LINE	DIRECTION	LENGTH
L1	N02°22'20"W	277.44'

NAD 83 (TARGET BOTTOM HOLE)			NAD 83 (SURFACE LOCATION)				
LATITUDE	=	40°08'32.79"	(40.142442)	LATITUDE	=	40°08'30.05"	(40.141681)
LONGITUDE	=	110°29'42.34"	(110.495094)	LONGITUDE	=	110°29'42.18"	(110.495050)
NAD 27 (TARGET BOTTOM HOLE)			NAD 27 (SURFACE LOCATION)				
LATITUDE	=	40°08'32.94"	(40.142483)	LATITUDE	=	40°08'30.20"	(40.141722)
LONGITUDE	=	110°29'39.78"	(110.494383)	LONGITUDE	=	110°29'39.66"	(110.494339)





**LEGEND:**

PROPOSED LOCATION



**BILL BARRETT CORPORATION**

**#14-7D-45 BTR**  
**SECTION 7, T4S, R5W, U.S.B.&M.**  
**533' FSL 1993' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

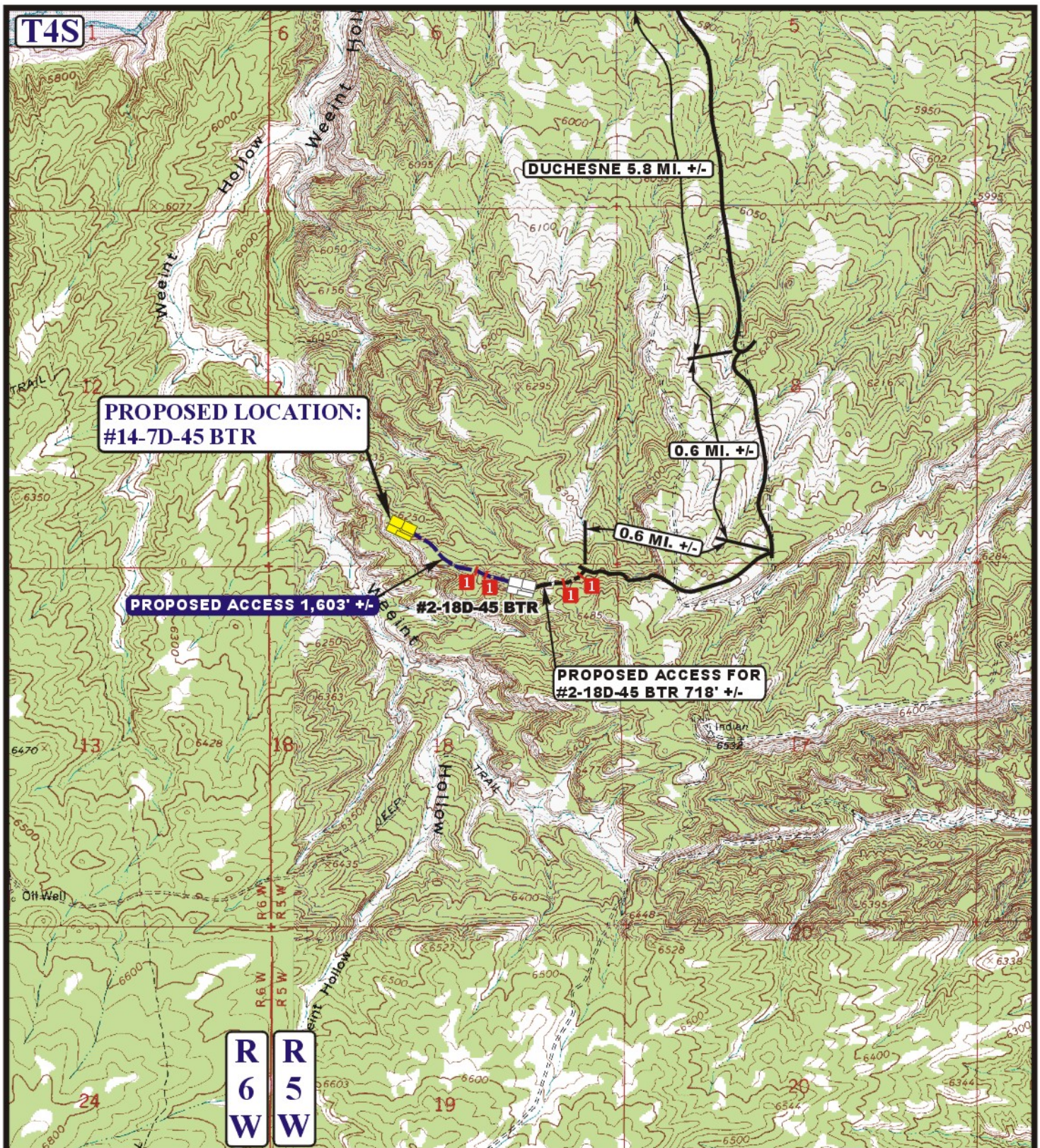
**TOPOGRAPHIC**  
**MAP**

**12** MONTH  
**10** DAY  
**10** YEAR

SCALE: 1:100,000 DRAWN BY: J.J. REVISED: 05-04-11







# LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- 18" CMP REQUIRED



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



# BILL BARRETT CORPORATION

**#14-7D-45 BTR**  
**SECTION 7, T4S, R5W, U.S.B.&M.**  
**533' FSL 1993' FWL**

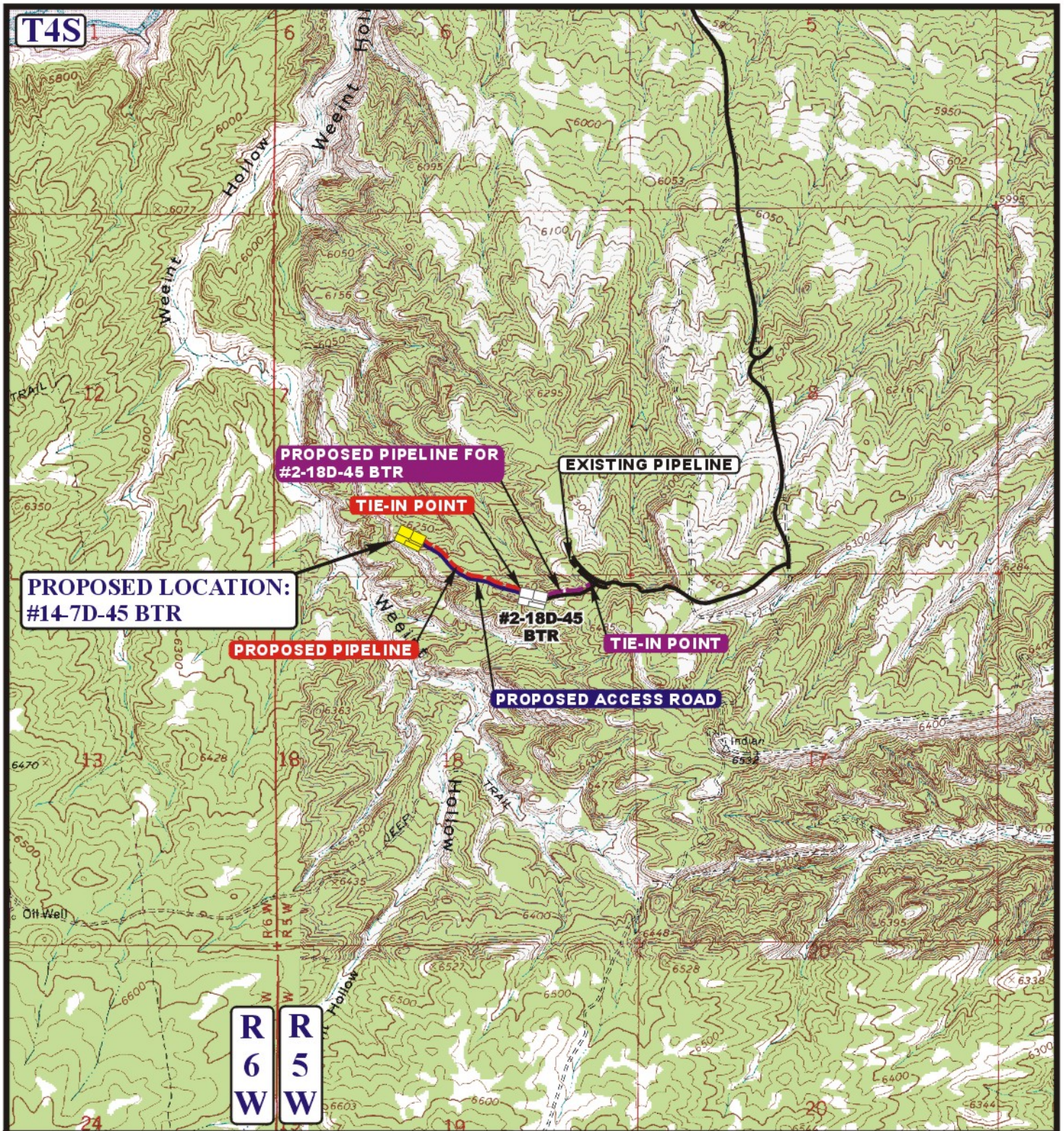
**TOPOGRAPHIC**  
**MAP**

**12** MONTH  
**10** DAY  
**10** YEAR

SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 05-04-11







**APPROXIMATE TOTAL PIPELINE DISTANCE = 1,597' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE



**BILL BARRETT CORPORATION**

**#14-7D-45 BTR**  
**SECTION 7, T4S, R5W, U.S.B.&M.**  
**533' FSL 1993' FWL**



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

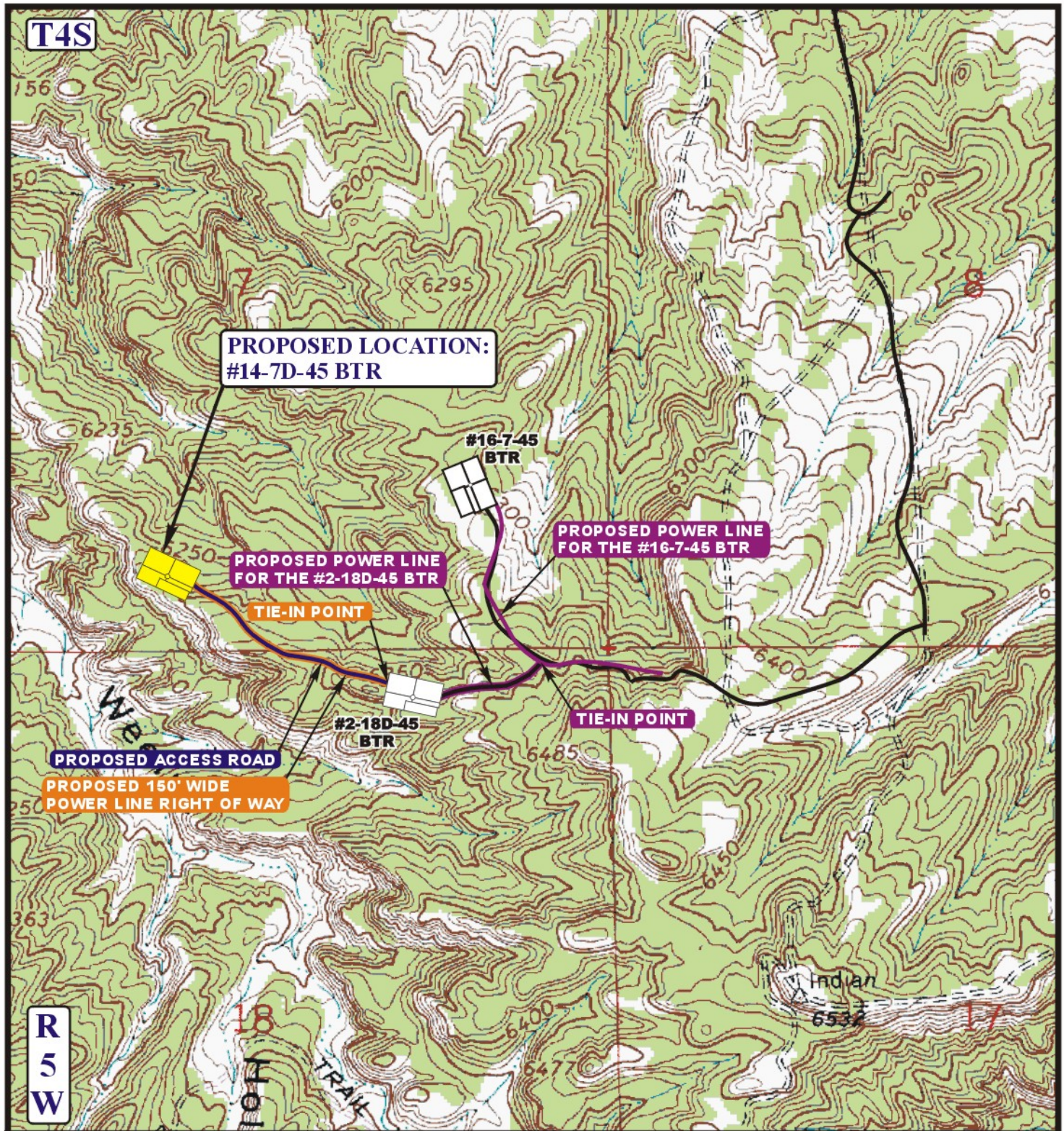
**TOPOGRAPHIC**  
**MAP**

**12** **10** **10**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 05-04-11







**APPROXIMATE TOTAL POWER LINE DISTANCE = 1,603' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING POWER LINE
- PROPOSED POWER LINE
- PROPOSED POWER LINE (SERVICING OTHER WELLS)



**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**BILL BARRETT CORPORATION**

**#14-7D-45 BTR**  
**SECTION 7, T4S, R5W, U.S.B.&M.**  
**533' FSL 1993' FWL**

**TOPOGRAPHIC  
MAP**

**12 10 10**  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: J.J. REVISED: 05-04-11

**D  
TOPO**





## COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature  
 Error System: ISCWSA  
 Scan Method: Closest Approach 3D  
 Error Surface: Elliptical Conic  
 Warning Method: Error Ratio

## SITE DETAILS: 14-7D-45 BTR

## Blacktail Ridge

Site Centre Latitude: 40° 8' 30.199 N  
 Longitude: 110° 29' 39.620 W

Positional Uncertainty: 0.0  
 Convergence: 0.64  
 Local North: True

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
14-7D 3PT MKR	5613.0	277.2	-12.3	40° 8' 32.939 N	110° 29' 39.779 W	Rectangle (Sides: L200.0 W200.0)
14-7D PBHL	8743.0	277.2	-12.3	40° 8' 32.939 N	110° 29' 39.779 W	Rectangle (Sides: L200.0 W200.0)

## FORMATION TOP DETAILS

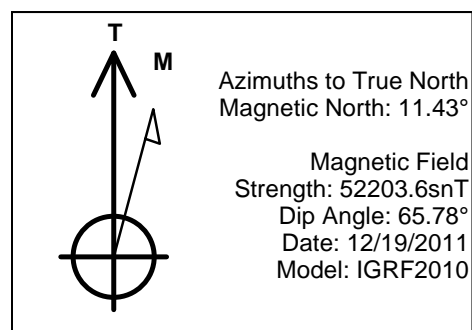
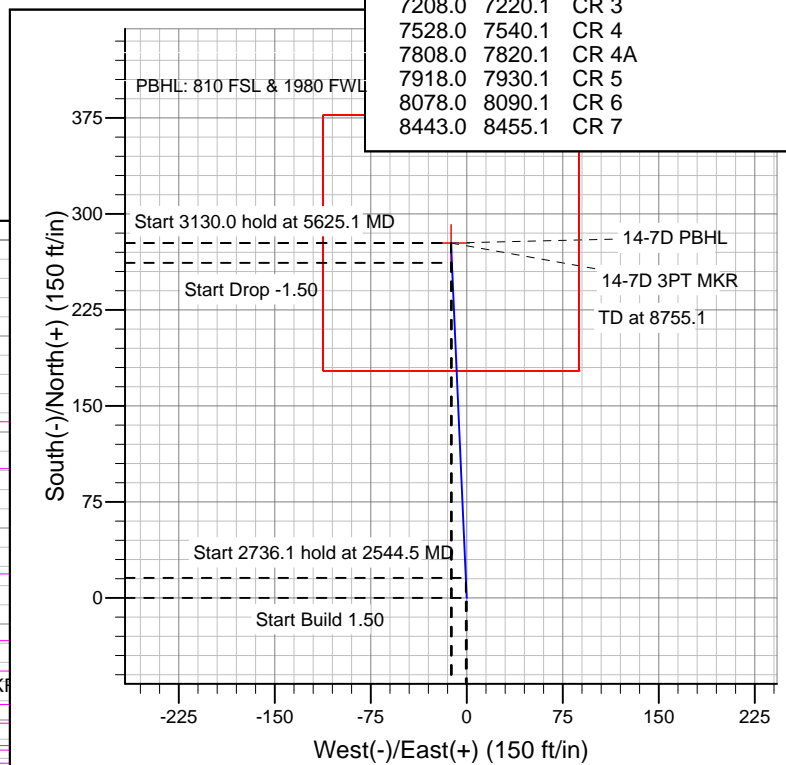
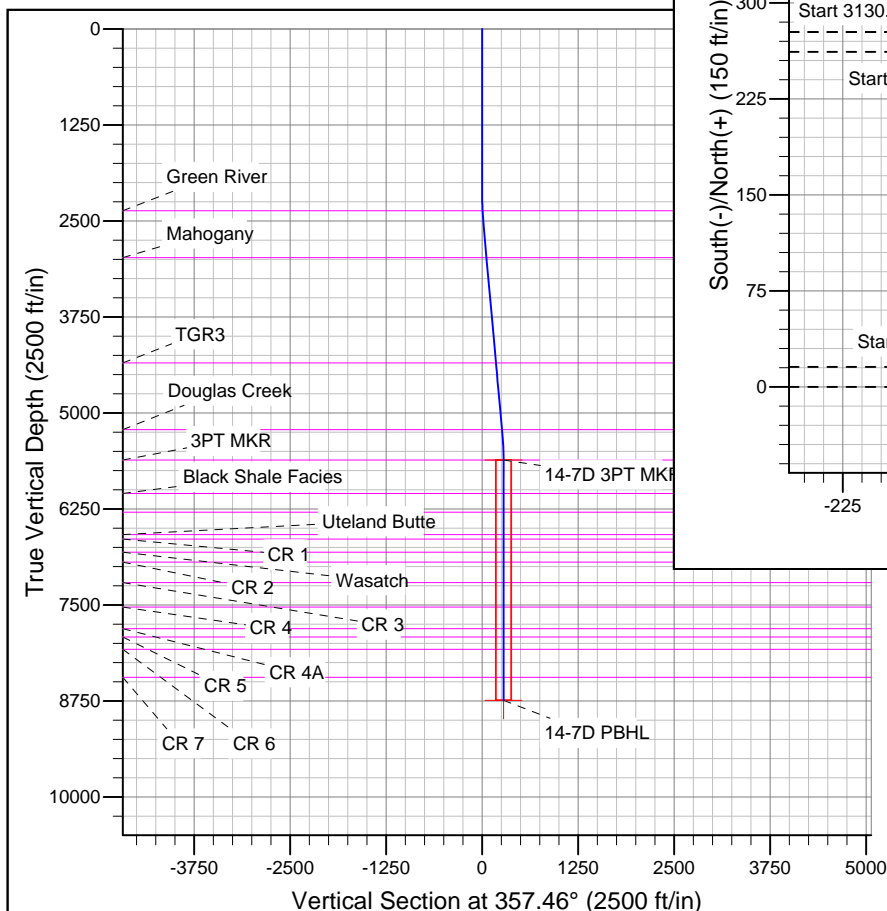
TVDPath	MDPath	Formation
2368.0	2368.1	Green River
2978.0	2980.2	Mahogany
4348.0	4355.8	TGR3
5218.0	5229.4	Douglas Creek
5613.0	5625.1	3PT MKR
6048.0	6060.1	Black Shale Facies
6293.0	6305.1	Castle Peak
6583.0	6595.1	Uteland Butte
6643.0	6655.1	CR 1
6813.0	6825.1	Wasatch
6943.0	6955.1	CR 2
7208.0	7220.1	CR 3
7528.0	7540.1	CR 4
7808.0	7820.1	CR 4A
7918.0	7930.1	CR 5
8078.0	8090.1	CR 6
8443.0	8455.1	CR 7

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2200.0	0.00	0.00	2200.0	0.0	0.0	0.00	0.00	0.0	
3	2544.5	5.17	357.46	2544.0	15.5	-0.7	1.50	357.46	15.5	
4	5280.6	5.17	357.46	5269.0	261.7	-11.6	0.00	0.00	262.0	
5	5625.1	0.00	0.00	5613.0	277.2	-12.3	1.50	180.00	277.5	14-7D 3PT MKR
6	8755.1	0.00	0.00	8743.0	277.2	-12.3	0.00	0.00	277.5	14-7D PBHL

## CASING DETAILS

No casing data is available



# **BILL BARRETT CORP**

**DUCHESNE COUNTY, UT (NAD 27)**

**14-7D-45 BTR**

**14-7D-45 BTR**

**14-7D-45 BTR**

**Plan: Design #1**

## **Standard Planning Report**

**19 December, 2011**

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 14-7D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Site:</b>	14-7D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	14-7D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	14-7D-45 BTR		
<b>Design:</b>	Design #1		

<b>Project</b>	DUCHESNE COUNTY, UT (NAD 27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Ground Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Utah Central 4302		

Site	14-7D-45 BTR				
Site Position:		Northing:	660,248.10 ft	Latitude:	40° 8' 30.199 N
From:	Lat/Long	Easting:	2,281,142.74 ft	Longitude:	110° 29' 39.620 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.64 °

Well	14-7D-45 BTR					
Well Position	+N/-S	0.0 ft	Northing:	660,248.09 ft	Latitude:	40° 8' 30.199 N
	+E/-W	0.0 ft	Easting:	2,281,142.74 ft	Longitude:	110° 29' 39.620 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,284.0 ft

<b>Wellbore</b>	14-7D-45 BTR				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/19/2011	11.44	65.78	52,204

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	357.46

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,544.5	5.17	357.46	2,544.0	15.5	-0.7	1.50	1.50	0.00	357.46	
5,280.6	5.17	357.46	5,269.0	261.7	-11.6	0.00	0.00	0.00	0.00	
5,625.1	0.00	0.00	5,613.0	277.2	-12.3	1.50	-1.50	0.00	180.00	14-7D 3PT MKR
8,755.1	0.00	0.00	8,743.0	277.2	-12.3	0.00	0.00	0.00	0.00	14-7D PBHL

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 14-7D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Site:</b>	14-7D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	14-7D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	14-7D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	1.50	357.46	2,300.0	1.3	-0.1	1.3	1.50	1.50	0.00
2,368.1	2.52	357.46	2,368.0	3.7	-0.2	3.7	1.50	1.50	0.00
Green River									
2,400.0	3.00	357.46	2,399.9	5.2	-0.2	5.2	1.50	1.50	0.00
2,500.0	4.50	357.46	2,499.7	11.8	-0.5	11.8	1.50	1.50	0.00
2,544.5	5.17	357.46	2,544.0	15.5	-0.7	15.5	1.50	1.50	0.00
2,600.0	5.17	357.46	2,599.3	20.5	-0.9	20.5	0.00	0.00	0.00
2,700.0	5.17	357.46	2,698.9	29.5	-1.3	29.5	0.00	0.00	0.00
2,800.0	5.17	357.46	2,798.5	38.5	-1.7	38.5	0.00	0.00	0.00
2,900.0	5.17	357.46	2,898.1	47.5	-2.1	47.5	0.00	0.00	0.00
2,980.2	5.17	357.46	2,978.0	54.7	-2.4	54.8	0.00	0.00	0.00
Mahogany									
3,000.0	5.17	357.46	2,997.7	56.5	-2.5	56.6	0.00	0.00	0.00
3,100.0	5.17	357.46	3,097.3	65.5	-2.9	65.6	0.00	0.00	0.00
3,200.0	5.17	357.46	3,196.9	74.5	-3.3	74.6	0.00	0.00	0.00
3,300.0	5.17	357.46	3,296.5	83.5	-3.7	83.6	0.00	0.00	0.00
3,400.0	5.17	357.46	3,396.1	92.5	-4.1	92.6	0.00	0.00	0.00
3,500.0	5.17	357.46	3,495.6	101.5	-4.5	101.6	0.00	0.00	0.00
3,600.0	5.17	357.46	3,595.2	110.5	-4.9	110.6	0.00	0.00	0.00
3,700.0	5.17	357.46	3,694.8	119.5	-5.3	119.6	0.00	0.00	0.00
3,800.0	5.17	357.46	3,794.4	128.5	-5.7	128.6	0.00	0.00	0.00
3,900.0	5.17	357.46	3,894.0	137.5	-6.1	137.6	0.00	0.00	0.00
4,000.0	5.17	357.46	3,993.6	146.5	-6.5	146.6	0.00	0.00	0.00
4,100.0	5.17	357.46	4,093.2	155.5	-6.9	155.6	0.00	0.00	0.00
4,200.0	5.17	357.46	4,192.8	164.5	-7.3	164.6	0.00	0.00	0.00
4,300.0	5.17	357.46	4,292.4	173.5	-7.7	173.6	0.00	0.00	0.00
4,355.8	5.17	357.46	4,348.0	178.5	-7.9	178.7	0.00	0.00	0.00
TGR3									
4,400.0	5.17	357.46	4,392.0	182.5	-8.1	182.6	0.00	0.00	0.00
4,500.0	5.17	357.46	4,491.6	191.5	-8.5	191.7	0.00	0.00	0.00

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 14-7D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Site:</b>	14-7D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	14-7D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	14-7D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.0	5.17	357.46	4,591.2	200.5	-8.9	200.7	0.00	0.00	0.00
4,700.0	5.17	357.46	4,690.8	209.5	-9.3	209.7	0.00	0.00	0.00
4,800.0	5.17	357.46	4,790.4	218.5	-9.7	218.7	0.00	0.00	0.00
4,900.0	5.17	357.46	4,890.0	227.5	-10.1	227.7	0.00	0.00	0.00
5,000.0	5.17	357.46	4,989.6	236.5	-10.5	236.7	0.00	0.00	0.00
5,100.0	5.17	357.46	5,089.1	245.4	-10.9	245.7	0.00	0.00	0.00
5,200.0	5.17	357.46	5,188.7	254.4	-11.3	254.7	0.00	0.00	0.00
5,229.4	5.17	357.46	5,218.0	257.1	-11.4	257.3	0.00	0.00	0.00
<b>Douglas Creek</b>									
5,280.6	5.17	357.46	5,269.0	261.7	-11.6	262.0	0.00	0.00	0.00
5,300.0	4.88	357.46	5,288.3	263.4	-11.7	263.7	1.50	-1.50	0.00
5,400.0	3.38	357.46	5,388.1	270.6	-12.0	270.8	1.50	-1.50	0.00
5,500.0	1.88	357.46	5,488.0	275.2	-12.2	275.4	1.50	-1.50	0.00
5,600.0	0.38	357.46	5,587.9	277.1	-12.3	277.4	1.50	-1.50	0.00
5,625.1	0.00	0.00	5,613.0	277.2	-12.3	277.5	1.50	-1.50	10.14
<b>3PT MKR - 14-7D 3PT MKR</b>									
5,700.0	0.00	0.00	5,687.9	277.2	-12.3	277.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,787.9	277.2	-12.3	277.5	0.00	0.00	0.00
5,900.0	0.00	0.00	5,887.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,987.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,060.1	0.00	0.00	6,048.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>Black Shale Facies</b>									
6,100.0	0.00	0.00	6,087.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,187.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,287.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,305.1	0.00	0.00	6,293.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>Castle Peak</b>									
6,400.0	0.00	0.00	6,387.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,487.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,595.1	0.00	0.00	6,583.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>Uteland Butte</b>									
6,600.0	0.00	0.00	6,587.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,655.1	0.00	0.00	6,643.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 1</b>									
6,700.0	0.00	0.00	6,687.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,787.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,825.1	0.00	0.00	6,813.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>Wasatch</b>									
6,900.0	0.00	0.00	6,887.9	277.2	-12.3	277.5	0.00	0.00	0.00
6,955.1	0.00	0.00	6,943.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 2</b>									
7,000.0	0.00	0.00	6,987.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,100.0	0.00	0.00	7,087.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,187.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,220.1	0.00	0.00	7,208.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 3</b>									
7,300.0	0.00	0.00	7,287.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,387.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,487.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,540.1	0.00	0.00	7,528.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 4</b>									
7,600.0	0.00	0.00	7,587.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,687.9	277.2	-12.3	277.5	0.00	0.00	0.00

**Bill Barrett Corp**

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 14-7D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 6300.0ft (Original Well Elev)
<b>Site:</b>	14-7D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	14-7D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	14-7D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,800.0	0.00	0.00	7,787.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,820.1	0.00	0.00	7,808.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 4A</b>									
7,900.0	0.00	0.00	7,887.9	277.2	-12.3	277.5	0.00	0.00	0.00
7,930.1	0.00	0.00	7,918.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 5</b>									
8,000.0	0.00	0.00	7,987.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,090.1	0.00	0.00	8,078.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 6</b>									
8,100.0	0.00	0.00	8,087.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,187.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,287.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,387.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,455.1	0.00	0.00	8,443.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>CR 7</b>									
8,500.0	0.00	0.00	8,487.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,587.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,687.9	277.2	-12.3	277.5	0.00	0.00	0.00
8,755.1	0.00	0.00	8,743.0	277.2	-12.3	277.5	0.00	0.00	0.00
<b>14-7D PBHL</b>									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,368.1	2,368.0	Green River		0.00		
2,980.2	2,978.0	Mahogany		0.00		
4,355.8	4,348.0	TGR3		0.00		
5,229.4	5,218.0	Douglas Creek		0.00		
5,625.1	5,613.0	3PT MKR		0.00		
6,060.1	6,048.0	Black Shale Facies		0.00		
6,305.1	6,293.0	Castle Peak		0.00		
6,595.1	6,583.0	Uteland Butte		0.00		
6,655.1	6,643.0	CR 1		0.00		
6,825.1	6,813.0	Wasatch		0.00		
6,955.1	6,943.0	CR 2		0.00		
7,220.1	7,208.0	CR 3		0.00		
7,540.1	7,528.0	CR 4		0.00		
7,820.1	7,808.0	CR 4A		0.00		
7,930.1	7,918.0	CR 5		0.00		
8,090.1	8,078.0	CR 6		0.00		
8,455.1	8,443.0	CR 7		0.00		



## **SURFACE USE PLAN**

### **BILL BARRETT CORPORATION**

#### **14-7D-45 BTR Well Pad**

#### **Duchesne County, Utah**

##### **14-7D-45 BTR**

SE SW, 533' FSL and 1993' FWL, Section 7, T4S-R5W (surface hole)

SE SW, 810' FSL and 1980' FWL, Section 7, T4S-R5W (bottom hole)

The onsite inspection for this pad occurred on November 16, 2011. This is a new pad with a total of one proposed well. Plat changes requested at the onsite are reflected within this APD and summarized below.

- a) Relocate topsoil from corners C & 6 to corners 6 & 7 area, corners 3 & 8 area and corners C & 4 area;
- b) Relocate topsoil from corners 1 & 2 area to corners 2 and 3 area;

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

#### 1. **Existing Roads:**

- a. The proposed well site is located approximately 7.4 miles southwest of Duchesne, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. The existing State Highway 40 would be utilized from Duchesne for 4.4 miles to the existing BBC maintained 16-7-45 BTR access road that would be utilized for 2.6 miles and provides access to the planned new access road.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Duchesne County Road Department maintenance are necessary to access the project area with no improvements proposed. No encroachment or pipeline crossing permits are required.

Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

- f. All existing roads would be maintained and kept in good repair during all phases of operation.

2. Planned Access Road:

- a. Approximately 1,603 feet of new access road trending northwest is planned from the proposed 2-18D-45 BTR access road. The 2-18D-45 BTR access road continues an additional 718 feet to the existing 16-7-45 BTR access road (see Topographic Map B). The access road crosses entirely Ute Tribe surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

- i. Two 18-inch culverts and no low-water crossings are anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.
- j. No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- l. All access roads and surface disturbing activities would conform to the appropriate standard, **no higher than necessary**, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition – Revised 2007.
- m. The operator would be responsible for all maintenance needs of the new access road.

3. Location of Existing Wells (see One-Mile Radius Map):

- a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:
  - i. water wells none
  - ii. injection wells none
  - iii. disposal wells none
  - iv. drilling wells none
  - v. temp shut-in wells none
  - vi. producing wells two
  - vii. abandoned wells none

4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 glycol tank, (3) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 500 bbl test tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 1,597 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending southeast to the proposed 2-18D-45 BTR pipeline corridor. The 2-18D-45 BTR pipeline corridor continues an additional 178 feet to the existing 16-7-45 BTR pipeline corridor. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely Ute Tribe surface.
- g. The new segment of gas pipeline would be surface laid within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Construction of the ROW would temporarily utilize the 30 foot disturbed width for the road for a total disturbed width of 60 foot for the road and pipeline corridors. The use of the proposed well site and access roads would facilitate the staging of the pipeline construction.
- i. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.
- j. All permanent above-ground structures would be painted a flat, non-reflective color, such as Beetle Green, to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

Bill Barrett Corporation  
 Surface Use Plan  
 #14-7D-45 BTR Pad  
 Duchesne County, UT

- k. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.
- l. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

- a. Water for the drilling and completion would be trucked from any of the following locations:

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-180	Duchesne City Water Service District	5 cfs	8/13/2004	Knight Diversion Dam	Duchesne River
43-1202, Change a13837	Myton City	5.49 cfr and 3967 acre feet	3/21/1986	Knight Diversion Dam	Duchesne River
43-10444, Appln A57477	Duchesne County Upper Country Water	2 cfs	1994	Ditch at Source	Cow Canyon Spring
43-10446, Appln F57432	Duchesne County Upper Country Water	1.58 cfs	1994	Ditch at Source	Cow Canyon Spring
43-1273, Appln A17462	J.J.N.P. Company	7 cfs	1946	Strawberry River	Strawberry River
43-1273, Appln t36590	J.J.N.P. Company	4 cfs	6/03/2010	Strawberry River	Strawberry River
43-2505, Appln t37379	McKinnon Ranch Properties, LC	1.3 cfs	4/28/2011	Pumped from Sec, 17, T4SR6W	Water Canyon Lake
43-12415, Change A17215a	Peatross Ranch, LLC	1.89 cfs	09/2011	Dugout Pond	Strawberry River

- b. No new water well is proposed with this application.
- c. Should additional water sources be pursued they would be properly permitted through the State of Utah – Division of Water Rights.
- d. Water use would vary in accordance with the formations to be drilled but would be up to approximately 5.41 acre feet for drilling and completion operations.

Bill Barrett Corporation  
 Surface Use Plan  
 #14-7D-45 BTR Pad  
 Duchesne County, UT

6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

- a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.
- b. The reserve pit would be constructed so as not to leak, break or allow any discharge.
- c. The reserve would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit. A minimum of two feet of free board would be maintained between the maximum fluid level and the top of the reserve pit at all times.
- d. To deter livestock from entering the pit, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.
- e. Drill cuttings would be contained in the pit and buried on-site for a period not to exceed six months, weather permitting
- f. Produced fluids from the well other than water would be decanted into steel test tank(s) until such time as construction of production facilities is completed. Any oil that may be accumulated would be transferred to a permanent production tank. Produced water may be used in further drilling and completion activities, evaporated in the pit, or would be hauled to one of the following state-approved disposal facilities:

<b>Disposal Facilities</b>
1. RNI Industries, Inc. – Pleasant Valley Disposal Pits, Sec. 25, 26, 35 & 36, T4S-R3W
2. Pro Water LLC – Blue Bench 13-1 Disposal Well (43-013-30971) NENE, Sec. 13, T3S-R5W
3. RN Industries, Inc. – Bluebell Disposal Ponds, Sec. 2, 4 & 9, T2S-R2W
4. Water Disposal, Inc. – Harmston 1-32-A1 Disposal Well (43-013-30224), UTR #00707, Sec. 32, T1S-R1W

Bill Barrett Corporation  
 Surface Use Plan  
 #14-7D-45 BTR Pad  
 Duchesne County, UT

<b>Disposal Facilities</b>
5. Unified Water Pits – Sec. 31, T2S-R4W
6. Iowa Tank Line Pits – 8500 BLM Fence Road, Pleasant Valley

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
- l. A flare pit may be constructed a minimum of 110' from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels,



Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.

- m. Hydrocarbons would be removed from the reserve pit would as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

8. Ancillary Facilities:

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A surface powerline corridor 1,603 feet in length is proposed for installation by third-party installer within a 150 foot wide powerline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.

9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 400 feet x 255 feet with an inboard reserve pit size of 235 feet x 70 feet x 8 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.
- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting,



Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.

- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.
- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

10. Plan for Restoration of the Surface:

- a. A site specific reclamation plan would be submitted, if requested, within 90 days of location construction to the surface managing agency.
- b. Site reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.
- c. The operator would control noxious weeds along access road use authorizations and well site by spraying or mechanical removal, according to the Utah Noxious Weed Act and as set forth in the approved surface damage agreements.
- d. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The reserve pit would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the reserve pit until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.
- e. The reserve pit and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable stabilization. Back slopes and fore slopes would be reduced as practical and scarified with the contour.

Bill Barrett Corporation  
Surface Use Plan  
#14-7D-45 BTR Pad  
Duchesne County, UT

The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the Ute Tribe specified seed mix.

- f. Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the Ute Tribe prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

11. Surface and Mineral Ownership:

- a. Surface ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.
- b. Mineral ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.

12. Other Information:

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as report 10-222 (U-10-MQ-0922i) dated January 14, 2011.
- b. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.

Bill Barrett Corporation  
 Surface Use Plan  
 #14-7D-45 BTR Pad  
 Duchesne County, UT

d. Disturbance estimates:

**Approximate Acreage Disturbances**

Well Pad		3.151	acres
Access		**	
Pipeline		**	
Powerline	1,603 feet	5.521	acres
<b>Total</b>		<b>8.672</b>	<b>acres</b>

\*\*Access and Pipeline Disturbance included within Powerline

OPERATOR CERTIFICATION

Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under Bill Barrett Corporations federal nationwide bond. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

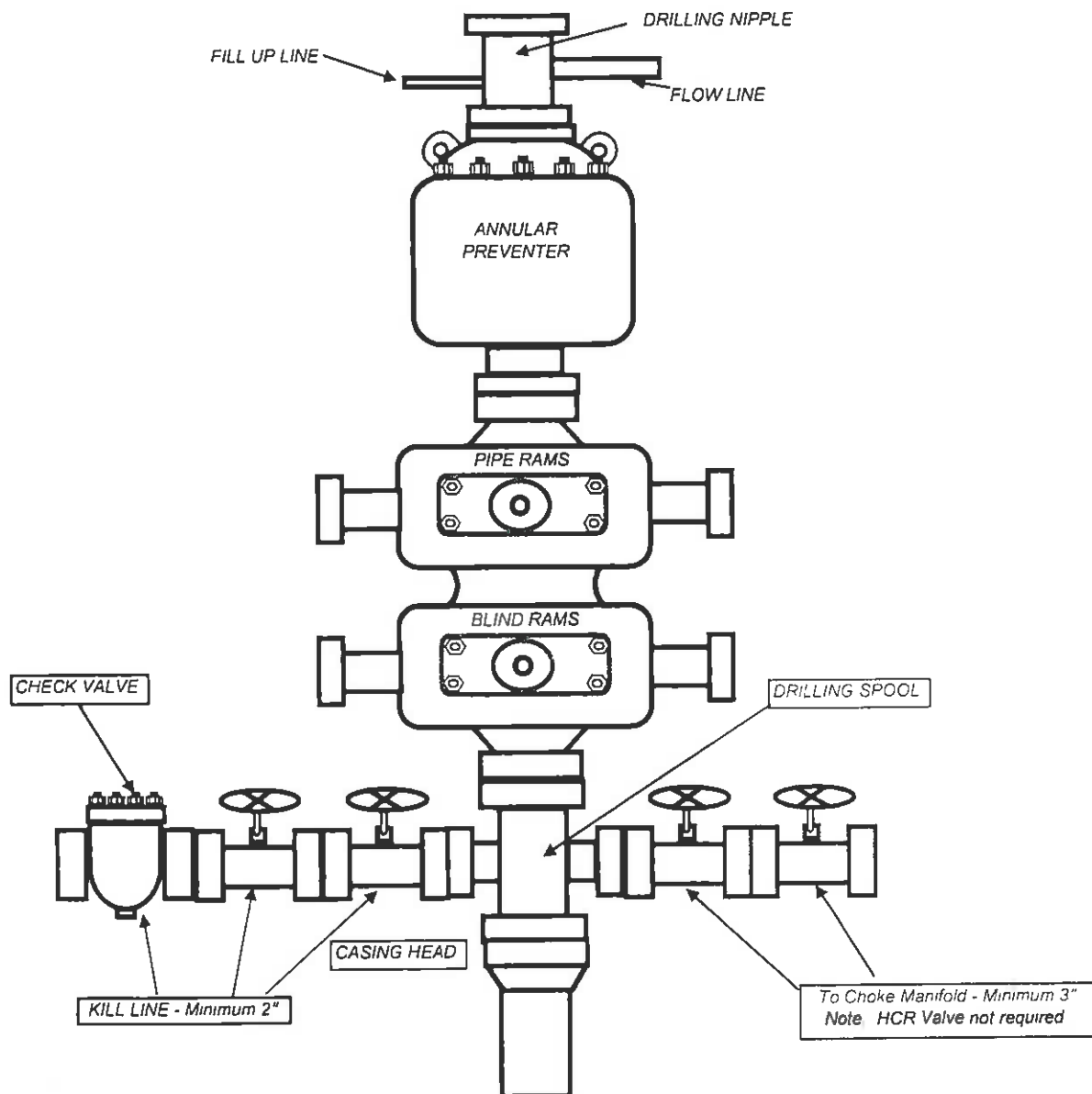
Executed this \_\_\_\_\_ day of \_\_\_\_\_ 2012  
 Name: Venessa Langmacher  
 Position Title: Senior Permit Analyst  
 Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202  
 Telephone: 303-312-8172  
 E-mail: vlangmacher@billbarrettcorp.com  
 Field Representative: Kary Eldredge / Bill Barrett Corporation  
 Address: 1820 W. Highway 40, Roosevelt, UT 84066  
 Telephone: 435-725-3515 (office); 435-724-6789 (mobile)  
 E-mail: keldredge@billbarrettcorp.com

---

Venessa Langmacher, Senior Permit Analyst

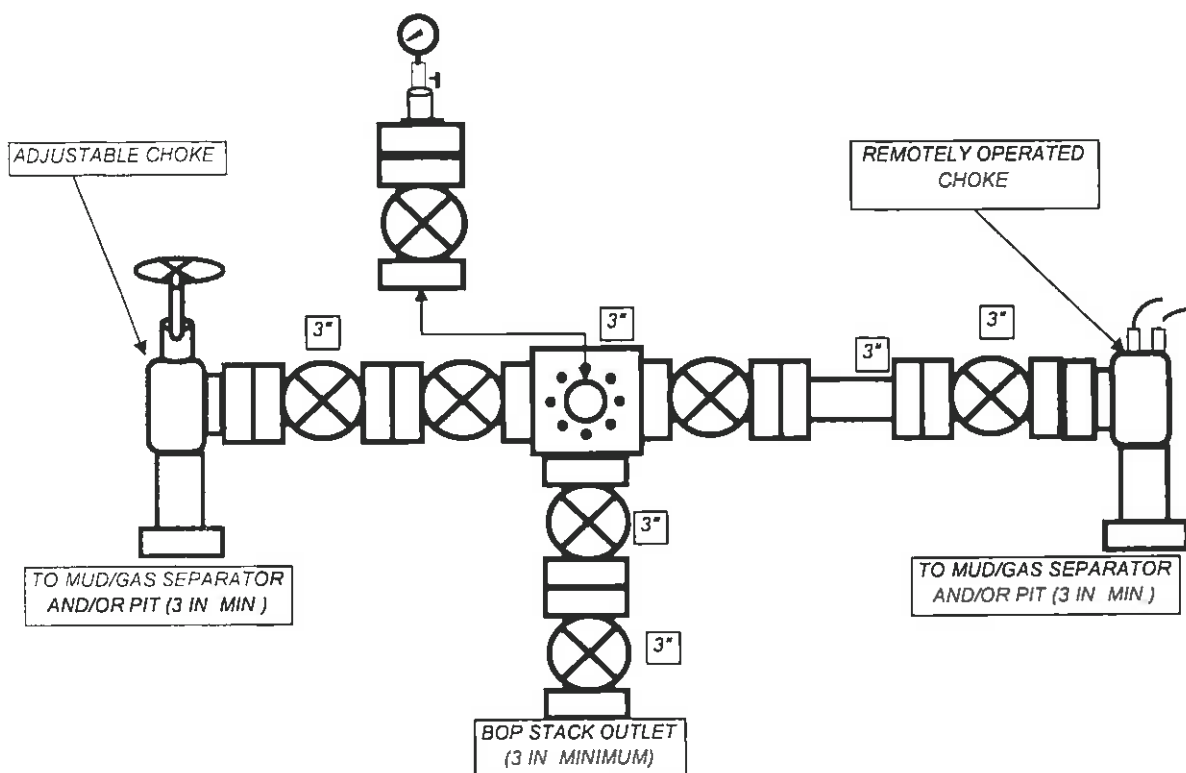
## BILL BARRETT CORPORATION

### TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



# BILL BARRETT CORPORATION

## TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





February 8, 2012

Ms. Diana Mason – Petroleum Technician  
State of Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11  
**Blacktail Ridge Area #14-7D-45 BTR Well**  
Surface: 533' FSL & 1,993' FWL, SESW, 7-T4S-R5W, USM  
Bottom Hole: 810' FSL & 1,980' FWL, SESW, 7-T4S-R5W, USM  
Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rules R649-2, R649-3, R649-10 and R649-11, pertaining to the Location and Siting of Wells.

- The proposed location is within our Blacktail Ridge Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area.
- The well will be drilled under an Exploration and Development Agreement between the Ute Indian Tribe and Ute Distribution Corporation. Ute Energy, LLC owns a right to participate in this well.
- BBC certifies that it is the working interest owner of all lands within 460 feet of the proposed well location, and together with Ute Energy, LLC, we own 100% of the working interest in these lands.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. Should you have any questions or need further information, please contact me at 303-312-8544.

Sincerely,

David Watts  
Landman

1099 18<sup>TH</sup> STREET  
SUITE 2300  
DENVER, CO 80202  
P 303.293.9100  
F 303.291.0420

RECEIVED: February 08, 2012



X-Section  
Scale  
1" = 40'  
1" = 100'

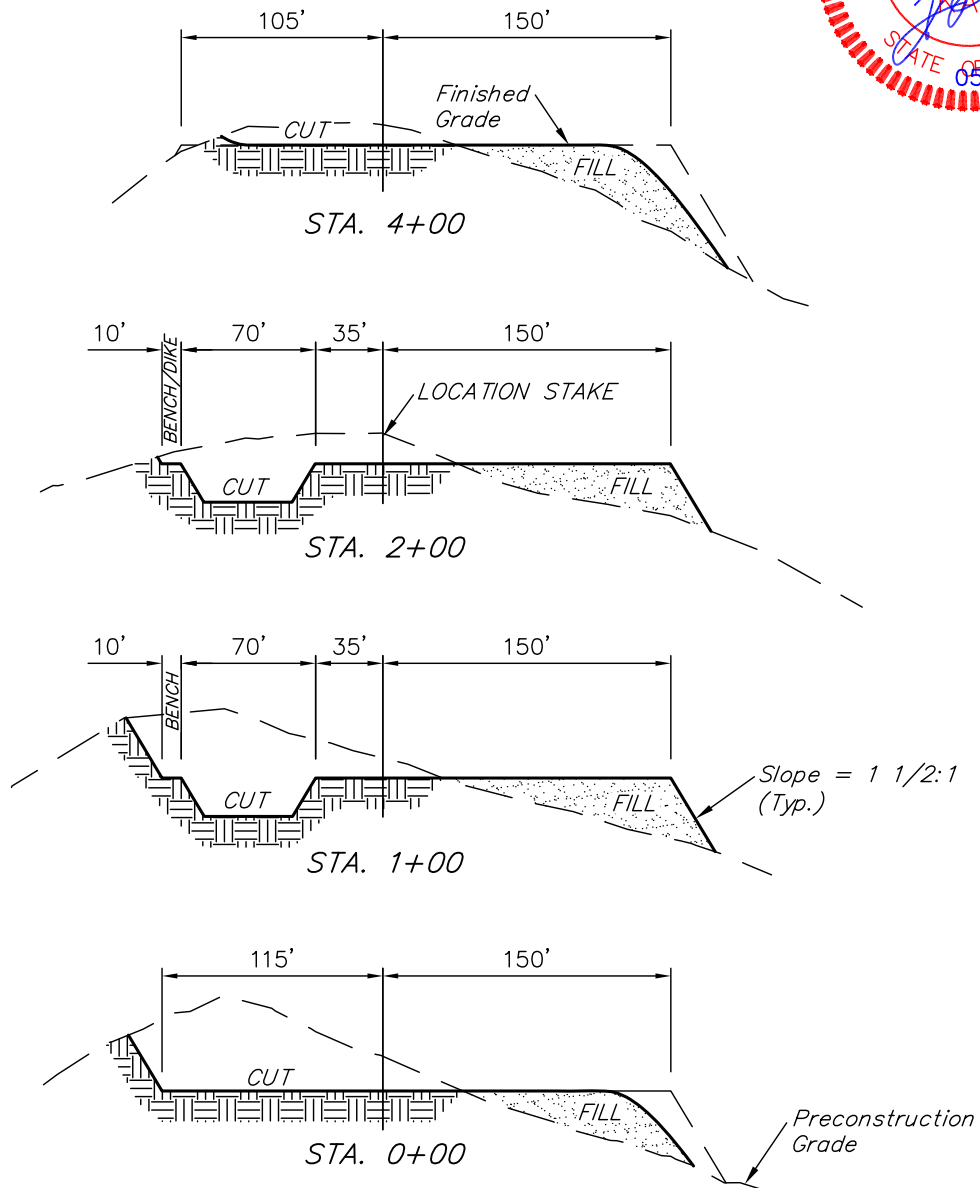
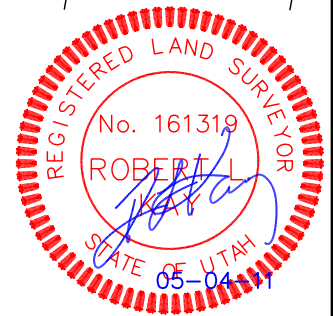
DATE: 12-16-10  
DRAWN BY: S.B.  
REV: 05-04-11

# BILL BARRETT CORPORATION

## TYPICAL CROSS SECTIONS FOR

#14-7D-45 BTR  
SECTION 7, T4S, R5W, U.S.B.&M.  
533' FSL 1993' FWL

FIGURE #2



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

(12") Topsoil Stripping = 4,950 Cu. Yds.  
Remaining Location = 20,060 Cu. Yds.  
TOTAL CUT = 25,010 CU.YDS.  
FILL = 18,140 CU.YDS.

EXCESS MATERIAL = 6,870 Cu. Yds.  
Topsoil & Pit Backfill = 6,870 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: February 08, 2012



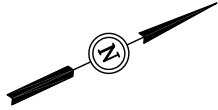
## BILL BARRETT CORPORATION

## TYPICAL RIG LAYOUT FOR

#14-7D-45 BTR

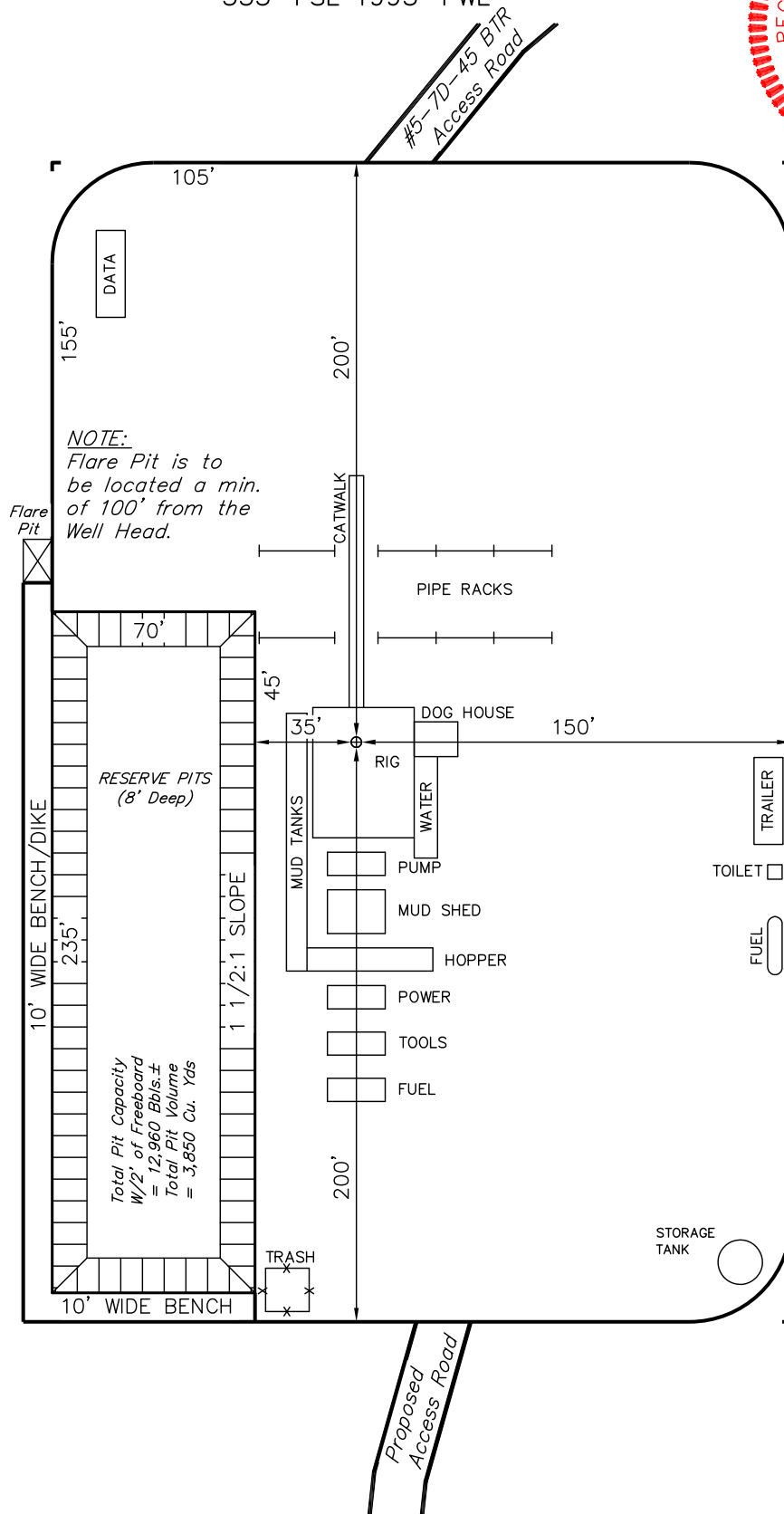
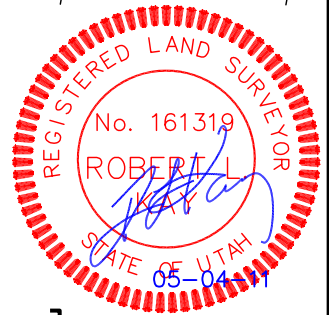
SECTION 7, T4S, R5W, U.S.B.&amp;M.

533' FSL 1993' FWL



SCALE: 1" = 60'  
 DATE: 12-16-10  
 DRAWN BY: S.B.  
 REV: 05-04-11

FIGURE #3



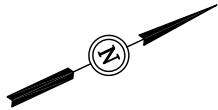
UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: February 08, 2012

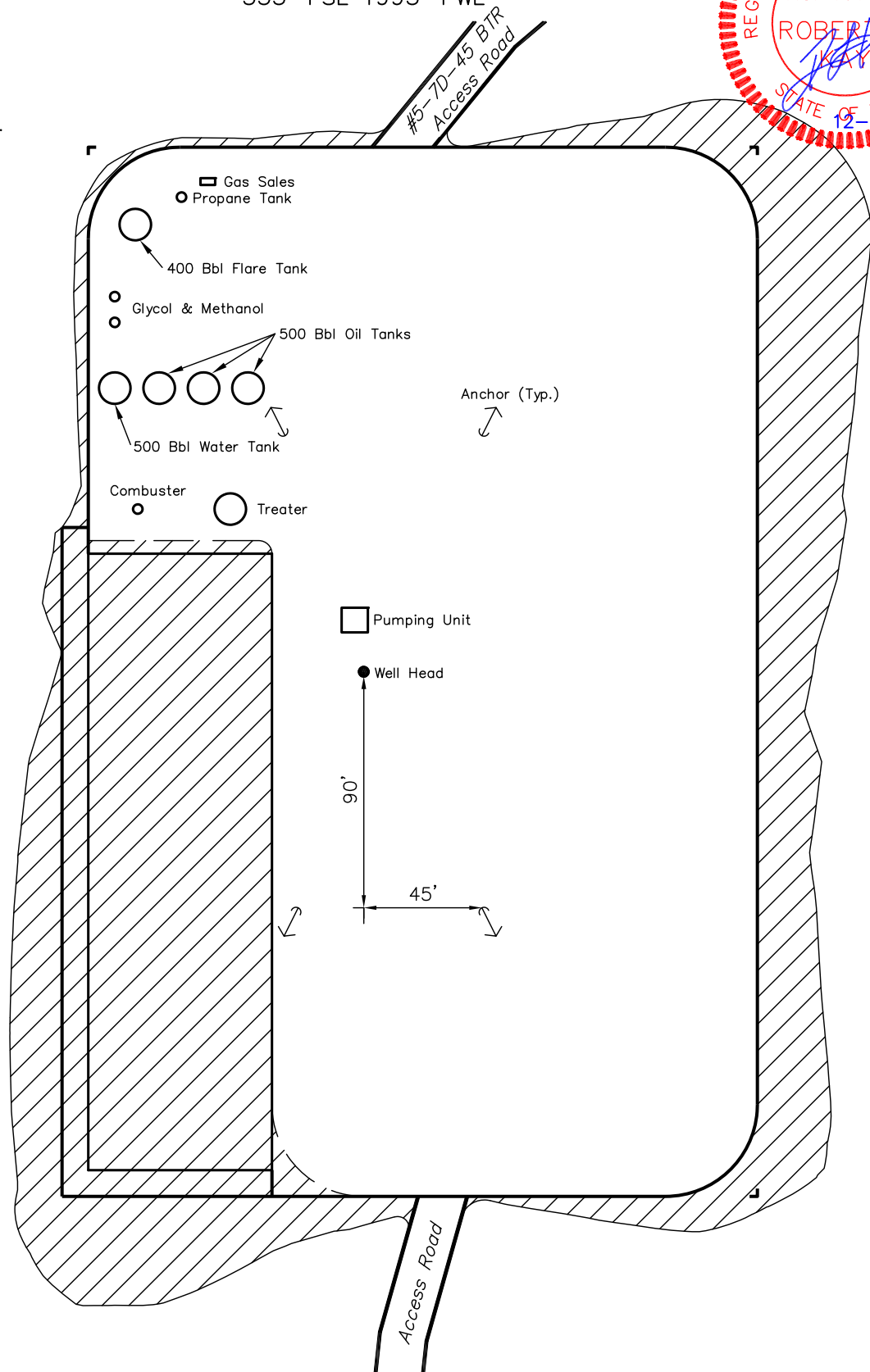
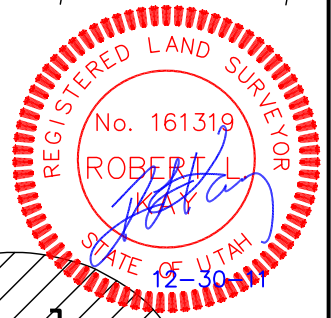
**BILL BARRETT CORPORATION**  
**INTERIM RECLAMATION PLAN FOR**

#14-7D-45 BTR  
 SECTION 7, T4S, R5W, U.S.B.&M.  
 533' FSL 1993' FWL

**FIGURE #4**



SCALE: 1" = 60'  
 DATE: 10-18-11  
 DRAWN BY: K.O.  
 REV: 12-30-11 S.B.

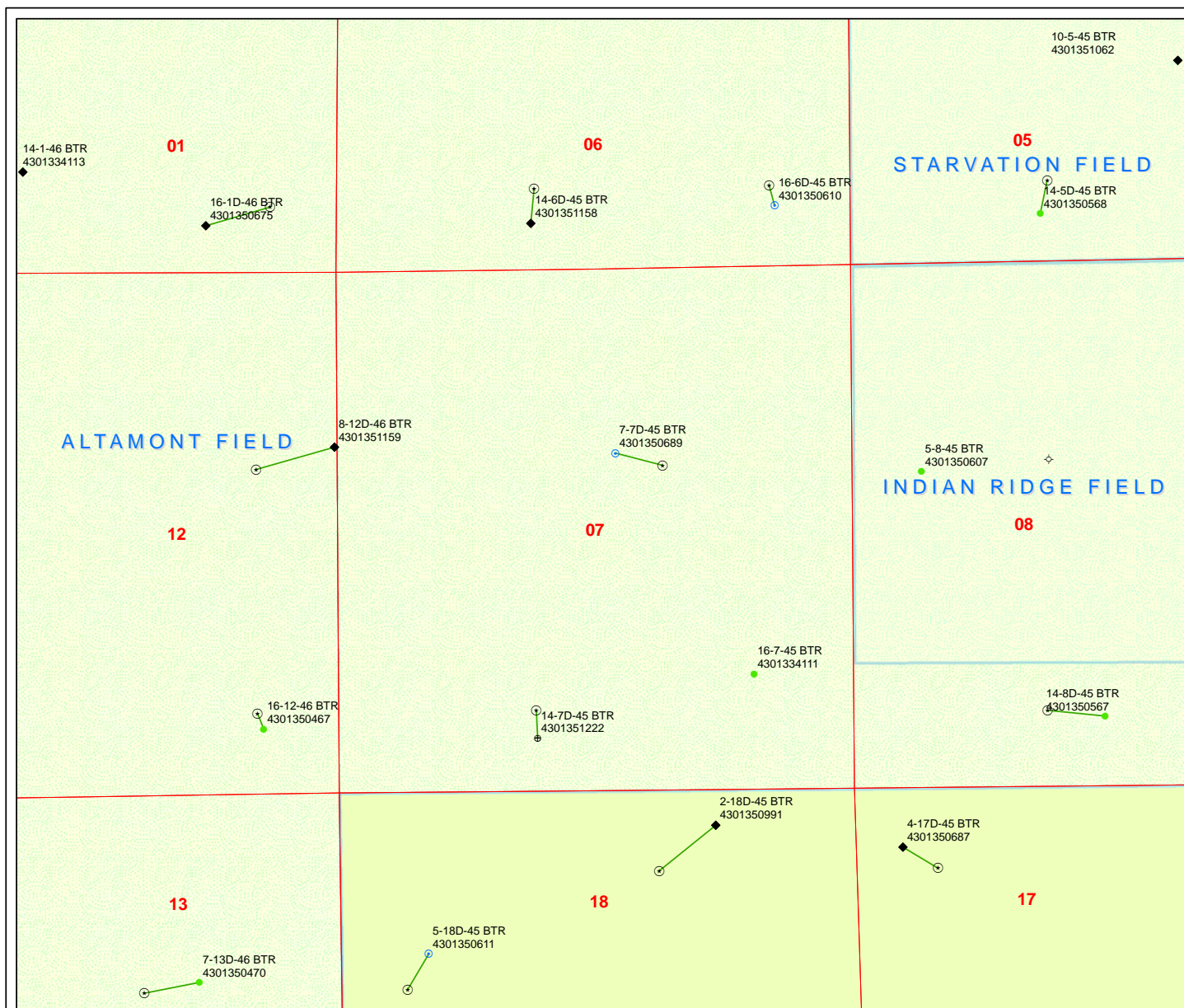


INTERIM RECLAMATION

APPROXIMATE ACREAGES  
 UN-RECLAIMED = ± 1.916 ACRES

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

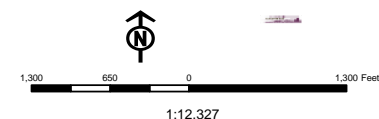
**RECEIVED:** February 08, 2012



**API Number: 4301351222**  
**Well Name: 14-7D-45 BTR**  
**Township T0.4 . Range R0.5 . Section 07**  
**Meridian: UBM**  
**Operator: BILL BARRETT CORP**

Map Prepared:  
 Map Produced by Diana Mason

Units Status	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERM	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
	SGW - Shut-in Gas Well
	SOW - Shut-in Oil Well
	TA - Temp. Abandoned
	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/8/2012

API NO. ASSIGNED: 43013512220000

WELL NAME: 14-7D-45 BTR

OPERATOR: BILL BARRETT CORP (N2165)

PHONE NUMBER: 303 312-8172

CONTACT: Venessa Langmacher

PROPOSED LOCATION: SESW 07 040S 050W

Permit Tech Review: ☒

SURFACE: 0533 FSL 1993 FWL

Engineering Review: ☐

BOTTOM: 0810 FSL 1980 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.14167

LONGITUDE: -110.49500

UTM SURF EASTINGS: 543017.00

NORTHINGS: 4443604.00

FIELD NAME: ALTAMONT

LEASE TYPE: 2 - Indian

LEASE NUMBER: 1420H626297

PROPOSED PRODUCING FORMATION(S): GREEN RIVER-WASATCH

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

## LOCATION AND SITING:

☒ PLAT☐ R649-2-3.☒ Bond: INDIAN - LPM8874725

Unit:

☐ Potash☐ R649-3-2. General☐ Oil Shale 190-5☐ Oil Shale 190-3☐ R649-3-3. Exception☐ Oil Shale 190-13☒ Drilling Unit☒ Water Permit: 43-180

Board Cause No: Cause 139-85

☐ RDCC Review:

Effective Date: 3/11/2010

☐ Fee Surface Agreement

Siting: 4 Prod LGRRV-WSTC Per Sectional Drilling Units

☐ Intent to Commingle☒ R649-3-11. Directional Drill

Commingle Approved

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason  
15 - Directional - dmason

RECEIVED: February 13, 2012



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** 14-7D-45 BTR  
**API Well Number:** 43013512220000  
**Lease Number:** 1420H626297  
**Surface Owner:** INDIAN  
**Approval Date:** 2/13/2012

**Issued to:**

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

**Authority:**

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-85. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas

API Well No: 43013512220000

website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 09 2012

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 1420H626297
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BILL BARRETT CORPORATION		7. If Unit or CA Agreement, Name and No.
Contact: VENESSA LANGMACHER E-Mail: viangmacher@billbarrettcorp.com		8. Lease Name and Well No. 14-7D-45 BTR
3a. Address 1099 18TH STREET SUITE 2300 DENVER, CO 80202	3b. Phone No. (include area code) Ph: 303-312-8172 Fx: 303-291-0420	9. API Well No. 43-013-51222
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESW 533FSL 1993FWL 40.141681 N Lat, 110.495050 W Lon At proposed prod. zone SESW 810FSL 1980FWL 40.142442 N Lat, 110.495094 W Lon		10. Field and Pool, or Exploratory ALTAMONT
14. Distance in miles and direction from nearest town or post office* 7.4 MILES SOUTHWEST OF DUCHESNE, UT		11. Sec., T., R., M., or Blk. and Survey or Area Sec 7 T4S R5W Mer UBM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 810' (BTM. HOLE)	16. No. of Acres in Lease 635.64	12. County or Parish DUCHESNE
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 2623'	19. Proposed Depth 8755 MD 8743 TVD	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6284 GL	22. Approximate date work will start 06/01/2012	17. Spacing Unit dedicated to this well 640.00
		20. BLM/BIA Bond No. on file LPM8874725
		23. Estimated duration 60 DAYS (D&C)

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) VENESSA LANGMACHER Ph: 303-312-8172	Date 02/08/2012
Title SENIOR PERMIT ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date OCT 17 2012
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

## CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #130457 verified by the BLM Well Information System  
For BILL BARRETT CORPORATION, sent to the Vernal  
Committed to AFMSS for processing by LESLIE ROBINSON on 02/16/2012 ()

NOTICE OF APPROVAL

RECEIVED

OCT 22 2012

DIV. OF OIL, GAS &amp; MINING

UDOGM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

17TV 0070AG

NOS-111



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Bill Barrett Corporation  
Well No: 14-7D-45 BTR  
API No: 43-013-51222

Location: SESW, Sec. 7, T4S, R5W  
Lease No: 14-20-H62-6297  
Agreement: N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.



**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Additional Stipulations:**

**Additional Stipulations:**

- All Production Equipment will be painted Beetle Green to help blend into the surrounding vegetation and meet VRM type objectives.
- Topsoil is to be relocated from corners C and 6 to corners 6 and 7 area, corners 3 & 8 and corners C & 4 area to help reduce the chance the topsoil getting impacted from erosion.
- See Exhibit One of the approved EA U&O-FY12-Q3-072 for additional mitigation measures that must be followed for this proposed action.

**General Conditions of Approval:**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- Bill Barrett Corporation will implement a "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, COA's, and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.

- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- A CBL shall be run from PBTD to the TOC on the production casing.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626297
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> 14-7D-45 BTR
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512220000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0533 FSL 1993 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 07 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>6/1/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE   <input type="checkbox"/> CHANGE TO PREVIOUS PLANS   <input type="checkbox"/> CHANGE WELL STATUS   <input type="checkbox"/> DEEPEN   <input type="checkbox"/> OPERATOR CHANGE   <input type="checkbox"/> PRODUCTION START OR RESUME   <input type="checkbox"/> REPERFORATE CURRENT FORMATION   <input type="checkbox"/> TUBING REPAIR   <input type="checkbox"/> WATER SHUTOFF   <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING   <input type="checkbox"/> CHANGE TUBING   <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS   <input type="checkbox"/> FRACTURE TREAT   <input type="checkbox"/> PLUG AND ABANDON   <input type="checkbox"/> RECLAMATION OF WELL SITE   <input type="checkbox"/> SIDETRACK TO REPAIR WELL   <input type="checkbox"/> VENT OR FLARE   <input type="checkbox"/> SI TA STATUS EXTENSION   <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR   <input type="checkbox"/> CHANGE WELL NAME   <input type="checkbox"/> CONVERT WELL TYPE   <input type="checkbox"/> NEW CONSTRUCTION   <input type="checkbox"/> PLUG BACK   <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION   <input type="checkbox"/> TEMPORARY ABANDON   <input type="checkbox"/> WATER DISPOSAL   <input checked="" type="checkbox"/> <b>APD EXTENSION</b>           OTHER: <input style="width: 100%;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p>BBC requests a one year extension for the subject APD.</p> </div> <div style="width: 35%; text-align: right;"> <p><b>Approved by the</b>  <b>Utah Division of</b>  <b>Oil, Gas and Mining</b></p> <p><b>Date:</b> February 19, 2013</p> <p><b>By:</b> </p> </div> </div>		
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher		<b>PHONE NUMBER</b> 303 312-8172
<b>SIGNATURE</b> N/A		<b>TITLE</b> Senior Permit Analyst
		<b>DATE</b> 1/21/2013



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

### Request for Permit Extension Validation Well Number 43013512220000

API: 43013512220000

Well Name: 14-7D-45 BTR

Location: 0533 FSL 1993 FWL QTR SESW SEC 07 TWP 040S RNG 050W MER U

Company Permit Issued to: BILL BARRETT CORP

Date Original Permit Issued: 2/13/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Venessa Langmacher

Date: 1/21/2013

Title: Senior Permit Analyst Representing: BILL BARRETT CORP



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626297
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 14-7D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0533 FSL 1993 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 07 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512220000
<b>PHONE NUMBER:</b> 303 312-8164 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 2/28/2013	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  This well was spud on 2/28/2013 at 2:40 pm by Triple A Drilling, Rig #TA 4037, Rig Type Soilmec SR/30. Continuous drilling will take place on approximately 4/7/2013.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 01, 2013		
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/1/2013	

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Bill Barrett Corporation Operator Account Number: N 2165  
Address: 1099 18th Street, Suite 2300  
city Denver  
state CO zip 80202 Phone Number: (303) 312-8172

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351222	14-7D-45 BTR		SESW	7	4S	5W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	<u>new</u>	<u>18949</u>	<u>2/28/2013</u>			<u>3/13/2013</u>	
<b>Comments:</b> Spudding Operation was conducted by Triple A Drilling @ 2:40 pm.							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<b>Comments:</b>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<b>Comments:</b>							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Venessa Langmacher

Name (Please Print)

Venessa Langmacher

Signature

Sr Permit Analyst

3/1/2013

Title

Date

**RECEIVED**

MAR 01 2013

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp. Rig Name/# Patterson Rig 506  
Submitted By Ricky kuhr Phone Number 435-828-6095  
Well Name/Number 14-7D-45 BTR  
Qtr/Qtr SW/NW Section 7 Township 4S Range 5W  
Lease Serial Number 1420H626297  
API Number 43-013-51222

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 4/3/2013 4:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 4/4/2013 2010 AM ☐ PM ☒

BOPE

- ☒ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

APR 02 2013

DIV. OF OIL, GAS & MINING

Date/Time 4/5/2013 1240 AM ☐ PM ☒

Remarks Any changes to the time frame will be e-mailed in a prompt amount of time

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626297
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> 14-7D-45 BTR
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512220000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0533 FSL 1993 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 07 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/1/2013	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE   <input type="checkbox"/> CHANGE TO PREVIOUS PLANS   <input type="checkbox"/> CHANGE WELL STATUS   <input type="checkbox"/> DEEPEN   <input type="checkbox"/> OPERATOR CHANGE   <input type="checkbox"/> PRODUCTION START OR RESUME   <input type="checkbox"/> REPERFORATE CURRENT FORMATION   <input type="checkbox"/> TUBING REPAIR   <input type="checkbox"/> WATER SHUTOFF   <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING   <input type="checkbox"/> CHANGE TUBING   <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS   <input type="checkbox"/> FRACTURE TREAT   <input type="checkbox"/> PLUG AND ABANDON   <input type="checkbox"/> RECLAMATION OF WELL SITE   <input type="checkbox"/> SIDETRACK TO REPAIR WELL   <input type="checkbox"/> VENT OR FLARE   <input type="checkbox"/> SI TA STATUS EXTENSION   <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR   <input type="checkbox"/> CHANGE WELL NAME   <input type="checkbox"/> CONVERT WELL TYPE   <input type="checkbox"/> NEW CONSTRUCTION   <input type="checkbox"/> PLUG BACK   <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION   <input type="checkbox"/> TEMPORARY ABANDON   <input type="checkbox"/> WATER DISPOSAL   <input type="checkbox"/> APD EXTENSION           OTHER: <input style="width: 100px;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;">           spud feb 2013 - no March 2013 activity to report.         </div> <div style="width: 35%; text-align: center;"> <b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>FOR RECORD ONLY</b>            April 17, 2013         </div> </div>		
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/5/2013	



BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp. Rig Name/# Patterson Rig 506  
Submitted By MONTE LONG Phone Number 435-828-6095  
Well Name/Number 14-7D-45 BTR  
Qtr/Qtr SW/NW Section 7 Township 4S Range 5W  
Lease Serial Number 1420H626297  
API Number 43-013-51222

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 4/3/2013 4:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☒ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 4/15/2013 2013 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

APR 14 2013

DIV. OF OIL, GAS & MINING

Date/Time 4/15/2013 1300 AM ☐ PM ☒

Remarks Any changes to the time frame will be e-mailed in a prompt amount of time

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626297
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> 14-7D-45 BTR
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512220000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0533 FSL 1993 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 07 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/24/2013	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This well had first production and first gas sales on 5/24/2013.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> May 28, 2013		
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/28/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626297
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> 14-7D-45 BTR
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512220000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0533 FSL 1993 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 07 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/31/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Attached is the May 2013 Drilling Activity for this well.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 June 06, 2013

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 6/5/2013

**14-7D-45 BTR 5/17/2013 06:00 - 5/18/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	SET FBT. SET FB EQUIP AND PLUMB IN. START SETTING FRAC LINE.

**14-7D-45 BTR 5/18/2013 06:00 - 5/19/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	CHECK PRESSURE. ND NIGHT CAP. NU FRAC MANDREL, 5" 10K FRAC VALVES, FRAC HEAD. PRES TEST CSG, MANDREL, VALVES TO 8450. PRES TEST FB EQUIP 500/ 2400/ 4500. FINISH SETTING FRAC LINE. FILLING FRAC LINE.

**14-7D-45 BTR 5/19/2013 06:00 - 5/20/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FILLING FRAC LINE.

**14-7D-45 BTR 5/20/2013 06:00 - 5/21/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	HEAT FRAC LINE.

**14-7D-45 BTR 5/21/2013 06:00 - 5/22/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.
07:00	2.00	09:00	SRIG	Rig Up/Down	HSM. DISCUSS AND SPOT EQUIP FOR DRIVE THRU. RU EQUIP.
09:00	1.50	10:30	PFRT	Perforating	ALL PERFS CORRELATED TO HES DSN/SD/DL LOG DATED 4/13/113 AND SLB CBL/GR/CCL DATED 4/24/13, GUNS ARE 3-1/8" EXP WITH 3104 PJO, 23 GR, .38" EHD, 36" PENT, 3 SPF ON 120* PHASING.  PU PERF GUNS FOR STG 1 INTO LUBE. 0 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7518'-7541'. RUN DOWN AND PERF CR-4, CR-4A, AND CR-5 FORM WITH 57 HOLES IN 19' NET. POOH AND VERIFY ALL PERFS SHOT. SHUT WELL IN AND SECURE FOR NIGHT.
10:30	5.00	15:30	SRIG	Rig Up/Down	MIRU HES FRAC FLEET.
15:30	14.50	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

**14-7D-45 BTR 5/22/2013 06:00 - 5/23/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.00	06:00	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.
06:00	0.00	06:00	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.84	06:50	FRAC	Frac. Job	<p>Frac Stage 1. Fluid System: Hybor G 16  Open Well, 0 Psi. ICP. BrokeDown At 9.7 Bpm And 3,000 Psi..  Pump 3900 Gals. 15% HCL And 114 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 70.6 Bpm And 3,572 Psi., Get ISIP, 2,360 Psi.. 0.74 Psi./Ft. F.G.. 42/57 Holes.  Con't With SlickWater Pad, 45,153 Gals..  Stage Into Hybor Pad, 70.3 Bpm At 3,549 Psi..  On Perfs, 70.3 Bpm At 4,104 Psi., 11,346 Gals.  Stage Into 2.0# 20/40 White Prop, 70.1 Bpm At 3,861 Psi..  On Perfs, 70.2 Bpm At 3,525 Psi., 8,668 Gals.  Stage Into 3.0# 20/40 White Prop, 69.9 Bpm At 3,420 Psi..  On Perfs, 68.9 Bpm At 3,170 Psi., 18,665 Gals.  Stage Into 3.5# 20/40 White Prop, 70.3 Bpm At 3,177 Psi..  On Perfs, 70.2 Bpm At 3,110 Psi., 9,685 Gals.  Stage Into 4.0# 20/40 White Prop, 70.2 Bpm At 3,101 Psi..  On Perfs, 70.2 Bpm At 3,044 Psi., 10,047 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 2,360 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 140,500#  Total Clean - 124,506 Gals.. 2,964 Bbls..  Produced Water - 64,143 Gals..  2% KCL - 58,411 Gals..  BWTR - 3,107 Bbls.  Max. Rate - 70.3 Bpm  Avg. Rate - 70.2 Bpm  Max. Psi. - 3,869 Psi.  Avg. Psi. - 3,282 Psi.</p>
06:50	0.17	07:00	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
07:00	1.25	08:15	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013.  Found And Correlated To Short Joint At 7,518 - 7,531'.  Drop Down To Depth, Set CBP At 7,976'. 2,050 Psi.  Perforate Stage 2 CR-4/CR-3 Zone, 7,419 - 7,656'. 45 Holes. 2,050 Psi.  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
08:15	0.16	08:25	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
08:25	1.08	09:30	FRAC	Frac. Job	<p>Frac Stage 2. Fluid System: Hybor G 16  Open Well, 1,863 Psi. ICP. BrokeDown At 10.0 Bpm And 2,693 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.6 Bpm And 3,960 Psi., Get ISIP, 2,136 Psi.. 0.72 Psi./Ft. F.G.. 39/45 Holes.  Con't With SlickWater Pad, 48,118 Gals..  Stage Into Hybor Pad, 72.2 Bpm At 3,750 Psi..  On Perfs, 72.1 Bpm At 3,941 Psi., 12,158 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,977 Psi..  On Perfs, 72.1 Bpm At 3,581 Psi., 8,431 Gals.  Stage Into 3.0# 20/40 White Prop, 72.1 Bpm At 3,562 Psi..  On Perfs, 72.1 Bpm At 3,272 Psi., 22,858 Gals.  Stage Into 3.5# 20/40 White Prop, 72.1 Bpm At 3,219 Psi..  On Perfs, 72.1 Bpm At 3,143 Psi., 9,393 Gals.  Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 3,127 Psi..  On Perfs, 72.3 Bpm At 3,097 Psi., 10,079 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 2,284 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 150,300#  Total Clean - 130,916 Gals.. 3,117 Bbls..  Produced Water - 66,169 Gals..  2% KCL - 62,919 Gals..  BWTR - 3,269 Bbls.  Max. Rate - 72.3 Bpm  Avg. Rate - 72.1 Bpm  Max. Psi. - 3,983 Psi.  Avg. Psi. - 3,325 Psi.</p>
09:30	0.17	09:40	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
09:40	1.00	10:40	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 6,820 - 6,842'. Drop Down To Depth, Set CBP At 7.406'. 1,850 Psi. Perforate Stage 3 CR-3/CR-2 Zone, 7,113 - 7,386'. 45 Holes. 1,950 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
10:40	0.08	10:45	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
10:45	1.09	11:50	FRAC	Frac. Job	Frac Stage 3. Fluid System: Hybor G 16 Open Well, 1,778 Psi. ICP. BrokeDown At 10.6 Bpm And 2,036 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 72.7 Bpm And 4,385 Psi., Get ISIP, 1,980 Psi.. 0.71 Psi./Ft. F.G.. 38/45 Holes. Con't With SlickWater Pad, 51,364 Gals.. Stage Into Hybor Pad, 71.9 Bpm At 3,655 Psi.. On Perfs, 72.4 Bpm At 3,928 Psi., 13,029 Gals. Stage Into 2.0# 20/40 White Prop, 72.2 Bpm At 3,942 Psi.. On Perfs, 72.2 Bpm At 3,558 Psi., 8,056 Gals. Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 3,558 Psi.. On Perfs, 72.3 Bpm At 3,259 Psi., 27,020 Gals. Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 3,083 Psi.. On Perfs, 70.2 Bpm At 2,936 Psi., 9,076 Gals. Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 3,005 Psi.. On Perfs, 72.2 Bpm At 2,984 Psi., 9,510 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 2,260 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured. Total 20/40 White Prop - 160,100# Total Clean - 138,165 Gals.. 3,290 Bbls.. Produced Water - 69,541 Gals.. 2% KCL - 66,691 Gals.. BWTR - 3,460 Bbls. Max. Rate - 72.4 Bpm Avg. Rate - 72.1 Bpm Max. Psi. - 3,946 Psi. Avg. Psi. - 3,229 Psi.
11:50	0.17	12:00	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
12:00	0.92	12:55	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 6,820 - 6,842'. Drop Down To Depth, Set CBP At 7.106'. 1,950 Psi. Perforate Stage 4 CR-2/Wasatch Zone, 6,847 - 7,086'. 45 Holes. 1,800 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
12:55	0.16	13:05	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
13:05	1.25	14:20	FRAC	Frac. Job	<p>Frac Stage 4. Fluid System: Hybor G 16  Open Well, 1,698 Psi. ICP. BrokeDown At 9.3 Bpm And 2,528 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.7 Bpm And 3,675 Psi., Get ISIP, 1,617 Psi.. 0.67 Psi./Ft. F.G.. 39/45 Holes.  Con't With SlickWater Pad, 48,121 Gals..  Stage Into Hybor Pad, 72.1 Bpm At 3,163 Psi..  On Perfs, 72.1 Bpm At 3,374 Psi., 12,202 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,370 Psi..  On Perfs, 72.2 Bpm At 3,000 Psi., 7,824 Gals.  Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 2,960 Psi..  On Perfs, 72.3 Bpm At 2,680 Psi., 24,622 Gals.  Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 2,681 Psi..  On Perfs, 72.3 Bpm At 2,658 Psi., 8,805 Gals.  Stage Into 4.0# 20/40 White Prop, 72.3 Bpm At 2,670 Psi..  On Perfs, 72.2 Bpm At 2,637 Psi., 9,611 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,862 Psi.. 0.71 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 150,500#  Total Clean - 130,248 Gals.. 3,101 Bbls..  Produced Water - 65,277 Gals..  2% KCL - 63,064 Gals..  BWTR - 3,261 Bbls.  Max. Rate - 72.4 Bpm  Avg. Rate - 72.2 Bpm  Max. Psi. - 3,414 Psi.  Avg. Psi. - 2,774 Psi.</p>
14:20	0.17	14:30	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
14:30	0.92	15:25	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013.  Found And Correlated To Short Joint At 5,527 - 5,549'.  Drop Down To Depth, Set CBP At 6.832'. 1,650 Psi.  Perforate Stage 5 CR-1A/CR-1/UteLand Butte Zone, 6,603 - 6,812'. 42 Holes. 1,500 Psi.  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
15:25	0.08	15:30	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
15:30	1.17	16:40	FRAC	Frac. Job	<p>Frac Stage 5. Fluid System: Hybor G 16  Open Well, 1,356 Psi. ICP. BrokeDown At 10.4 Bpm And 1,507 Psi..  Pump 3900 Gals. 15% HCL And 84 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.5 Bpm And 3,278 Psi., Get ISIP, 1,622 Psi.. 0.68 Psi./Ft. F.G.. 37/42 Holes.  Con't With SlickWater Pad, 52,827 Gals..  Stage Into .75# 100 Mesh Pad, 72.5 Bpm At 3,085 Psi..  On Perfs, 72.3 Bpm At 3,156 Psi., 19,920 Gals.  Stage Into 1.0# 20/40 White Prop, 72.2 Bpm At 3,189 Psi..  On Perfs, 72.1 Bpm At 3,094 Psi., 7,462 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,059 Psi..  On Perfs, 72.1 Bpm At 2,900 Psi., 7,511 Gals.  Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 2,882 Psi..  On Perfs, 72.1 Bpm At 2,717 Psi., 27,895 Gals.  Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 2,652 Psi..  On Perfs, 72.0 Bpm At 2,611 Psi., 8,476 Gals.  Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 2,609 Psi..  On Perfs, 72.1 Bpm At 2,581 Psi., 8,918 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,841 Psi.. 0.71 Psi./Ft. F.G.. WSI And Secured.  100 Mesh - 15,000#  Total 20/40 White Prop - 165,000#  Total Clean - 151,330 Gals.. 3,603 Bbls..  Produced Water - 69,267 Gals.  2% KCL - 80,182 Gals..  BWTR - 3,789 Bbls.  Max. Rate - 72.7 Bpm  Avg. Rate - 71.6 Bpm  Max. Psi. - 3,201 Psi.  Avg. Psi. - 2,850 Psi.</p>
16:40	0.16	16:50	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
16:50	1.00	17:50	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 5,527 - 5,549'. Drop Down To Depth, Set CBP At 6,594'. 1,500 Psi. Perforate Stage 6 Castle Peak/Black Shale Zone, 6,293 - 6,579'. 45 Holes. 1,300 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
17:50	0.08	17:55	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
17:55	1.17	19:05	FRAC	Frac. Job	Frac Stage 6. Fluid System: Hybor G 16 Open Well, 1,356 Psi. ICP. BrokeDown At 10.4 Bpm And 1,350 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 72.4 Bpm And 3,430 Psi., Get ISIP, 1,257 Psi.. 0.63 Psi./Ft. F.G.. 37/45 Holes. Con't With SlickWater Pad, 52,960 Gals.. Stage Into .75# 100 Mesh Pad, 72.4 Bpm At 2,612 Psi.. On Perfs, 72.4 Bpm At 2,517 Psi., 20,133 Gals. Stage Into 1.0# 20/40 White Prop, 72.2 Bpm At 2,789 Psi.. On Perfs, 72.2 Bpm At 2,669 Psi., 7,213 Gals. Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 2,640 Psi.. On Perfs, 72.1 Bpm At 2,448 Psi., 7,337 Gals. Stage Into 3.0# 20/40 White Prop, 72.1 Bpm At 2,426 Psi.. On Perfs, 72.2 Bpm At 2,252 Psi., 28,832 Gals. Stage Into 3.5# 20/40 White Prop, 72.4 Bpm At 2,221 Psi.. On Perfs, 72.2 Bpm At 2,176 Psi., 8,299 Gals. Stage Into 4.0# 20/40 White Prop, 72.3 Bpm At 2,178 Psi.. On Perfs, 72.2 Bpm At 2,145 Psi., 10,715 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,482 Psi.. 0.67 Psi./Ft. F.G.. WSI And Secured. 100 Mesh - 15,200# Total 20/40 White Prop - 165,300# Total Clean - 153,348 Gals.. 3,651 Bbls.. Produced Water - 68,920 Gals. 2% KCL - 82,529 Gals.. BWTR - 3,839 Bbls. Max. Rate - 72.6 Bpm Avg. Rate - 72.3 Bpm Max. Psi. - 2,873 Psi. Avg. Psi. - 2,396 Psi.
19:05	0.25	19:20	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun CBP Plug Assembly. Equalize To Well Pressure.
19:20	0.67	20:00	PFRT	Perforating	RIH With 3 1/8" Sinker Bar And CBP Plug Assembly. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 5,527 - 5,549'. Drop Down To Depth, Set CBP At 6,250'. 1,350 Psi. Bleed Pressure Off Well. POOH. LayDown Tools, WSI And Secured.
20:00	2.50	22:30	SRIG	Rig Up/Down	RigDown WireLine And Frac Crews, MOL.
22:30	7.50	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured.

**14-7D-45 BTR 5/24/2013 06:00 - 5/25/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	1.00	08:00	SRIG	Rig Up/Down	MIRU RIG & EQUIPMENT.
08:00	3.00	11:00	BOPI	Install BOP's	SIWP- 0. N/D FRAC TREE. N/U BOP & HYDRILL. R/U FLOOR & EQUIPMENT. SPOT CATWALK & PIPE RACKS. LOAD 262 JTS ON RACKS & TALLY TBG.
11:00	3.50	14:30	RUTB	Run Tubing	P/U 4-3/4 BIT, POBS, 1 JT 2-7/8 TBG & 2.31 XN- NIPPLE. RIH P/U 2-7/8 L-80 TBG TO KILL PLUG @ 6250'

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
14:30	3.50	18:00	DOPG	Drill Out Plugs	R/U POWER SWIVEL. BREAK CIRC. TEST CIRC EQUIPMENT & BOPE TO 2500 PSI, HELD.  D/O KILL PLUG @ 6250'. FCP- 650 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6576'. C/O SAND & D/O CBP @ 6594'. FCP- 750 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6777'. C/O SAND & D/O CBP @ 6832'. FCP- 650 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6951'. C/O SAND & D/O CBP @ 7106'. FCP- 600 ON 28/64 CHOKE. CIRC WELL CLEAN. R/D SWIVEL. SDFN. TURN WELL OVER TO FLOW BACK. SDFN.
18:00	12.00	06:00	LOCL	Lock Wellhead & Secure	WELL SECURE. CREW TRAVEL.

**14-7D-45 BTR 5/25/2013 06:00 - 5/26/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	5.50	12:30	DOPG	Drill Out Plugs	FCP- 300 ON 20/64 CHOKE. SWIVEL IN HOLE, TAG SAND @ 7331'. BREAK CIRC. C/O SAND & D/O CBP @ 7406'. FCP- 300 ON 32/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7562'. C/O SAND & D/O CBP @ 7676'. FCP- 150 ON 64/64 CHOKE.  SWIVEL IN HOLE, TAG SAND @ 7954'. C/O TO FLOAT COLLAR @ 8067'. D/O F/C. D/O CMT TO 8139' PBTD. JT 256 ALL THE WAY IN. CIRC WELL CLEAN. PUMPED 350 BBLS TOTAL. R/D SWIV
12:30	1.00	13:30	PULT	Pull Tubing	PULL ABOVE PERFS L/D 2-7/8 TBG TO 6211' & LAND TBG. 195 JTS TOTAL IN HOLE.
13:30	1.50	15:00			R/D FLOOR. N/D BOPE. N/U WELLHEAD. DROP BALL DOWN TBG & PUMPED BIT OFF. R/U TO SALES LINE. TURN OVER TO FLOW BACK.
15:00	2.00	17:00			R/D RIG & EQUIPMENT. MOL. SDFN.  NOTE- 67 JTS ON LOCATION.
17:00	13.00	06:00	LOCL	Lock Wellhead & Secure	WELL SECURE. CREW TRAVEL.

RECEIVED: Jun. 17, 2013



## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(*Sold, used for fuel, vented, etc.*)  
SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER MAHOGANY TGR3 DOUGLAS CREEK BLACK SHALE CASTLE PEAK UTELAND BUTTE WASATCH	2384 3142 4378 5241 6071 6321 6618 6847

## 32. Additional remarks (include plugging procedure):

TOC was calculated by CBL. Conductor cemented with grout. Attached is Treatment data, Logs(CBL will be mailed due to file size) and End of Well Report. First gas sales were on 5/24/2013, first oil sales were on 5/27/2013, .

## 33. Circle enclosed attachments:

- |                                                       |                    |               |                       |
|-------------------------------------------------------|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #210878 Verified by the BLM Well Information System.  
For BILL BARRETT CORPORATION, sent to the Vernal**

Name(*please print*) CHRISTINA HIRTLER

Title ADMINISTRATIVE ASSISTANT

Signature \_\_\_\_\_ (Electronic Submission)

Date 06/17/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

**RECEIVED: Jun. 17, 2013**

**14-7D-45 BTR Completion Report Continued\***

<b>44. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)</b>				
<b>AMOUNT AND TYPE OF MATERIAL</b>				
<u><i>Stage</i></u>	<u><i>BBS Slurry</i></u>	<u><i>lbs 100 Common Mesh</i></u>	<u><i>lbs 20/40 White Sand</i></u>	<u><i>gal 15% HCl Acid</i></u>
1	2964		140500	4000
2	3127		150300	3879
3	3290		160100	3850
4	3109		150500	3936
5	3623	14950	165350	3900
6	3667	15210	165390	3932

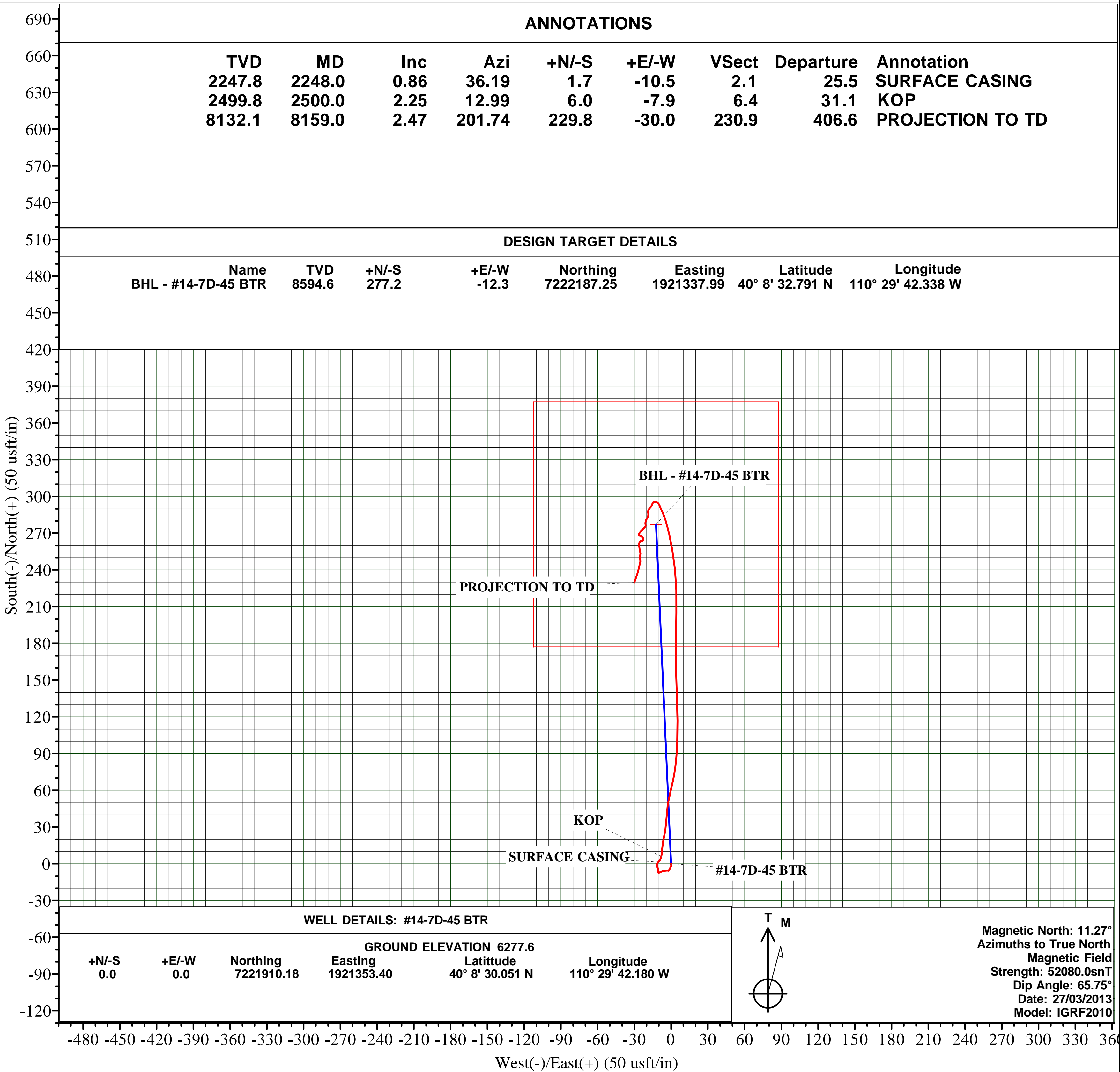
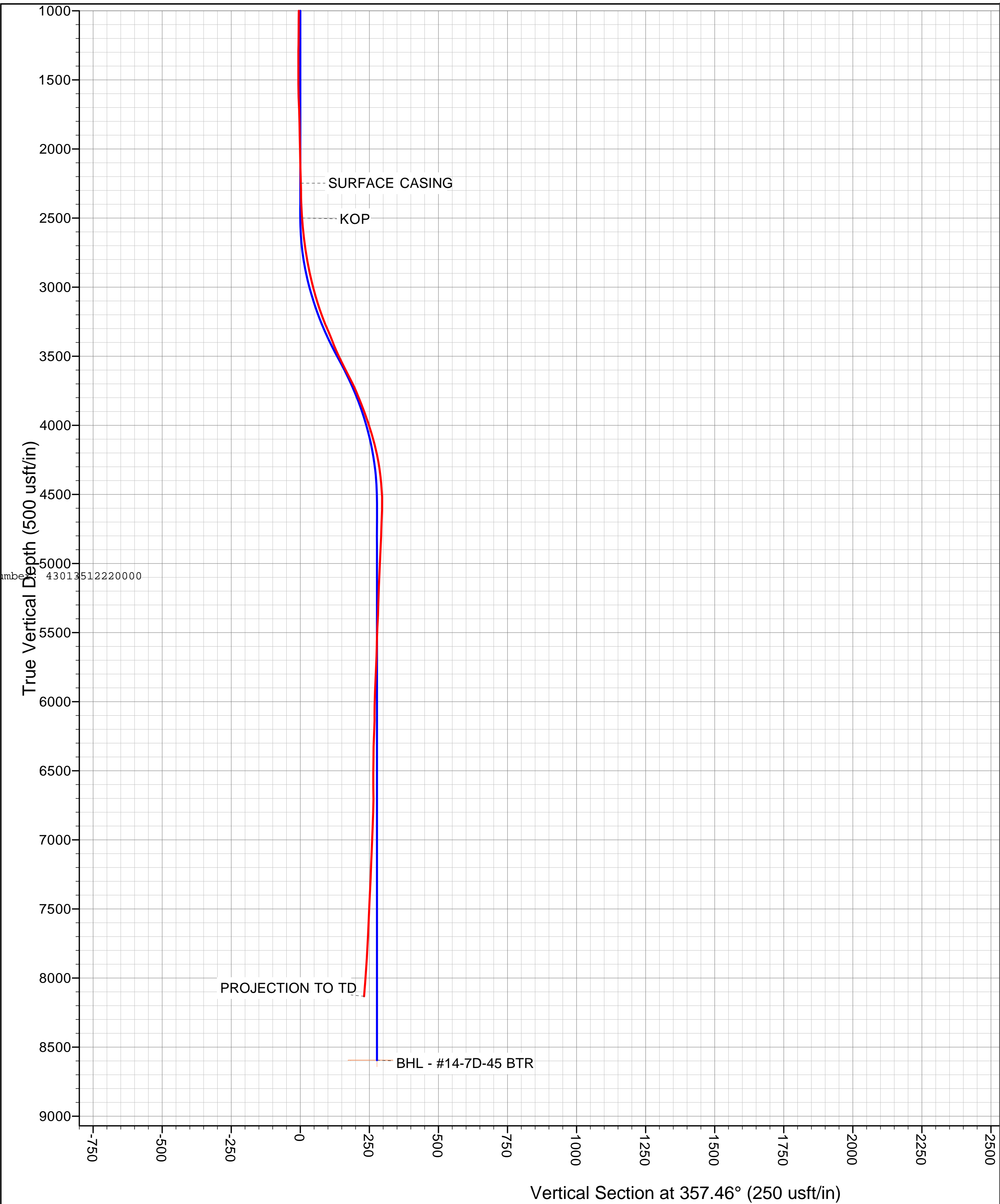
\*Depth intervals for frac information same as perforation record intervals.



Project: UTAH (DUCHESNE COUNTY - NAD 83)  
Site: SEC. 7 T4S R5W U.S.B.& M.  
Well: #14-7D-45 BTR  
Wellbore: JOB# 2009-172  
Design: FINAL SURVEYS



API Well Number: 43013512220000



## Survey Report



<b>Company:</b>	BILL BARRETT CORPORATION	<b>Local Co-ordinate Reference:</b>	Well #14-7D-45 BTR
<b>Project:</b>	UTAH (DUCESNE COUNTY - NAD 83)	<b>TVD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Site:</b>	SEC. 7 T4S R5W U.S.B. & M.	<b>MD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Well:</b>	#14-7D-45 BTR	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB# 2009-172	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,245.0	1.58	241.29	1,244.9	5,047.7	-6.9	-8.9	-6.5	0.80	0.64	-22.20
1,340.0	0.13	10.93	1,339.9	4,952.7	-7.4	-10.0	-6.9	1.75	-1.53	136.46
1,435.0	0.00	101.28	1,434.9	4,857.7	-7.3	-10.0	-6.8	0.14	-0.14	0.00
1,531.0	0.40	237.69	1,530.9	4,761.7	-7.5	-10.3	-7.0	0.42	0.42	0.00
1,626.0	1.19	0.91	1,625.9	4,666.7	-6.6	-10.5	-6.2	1.52	0.83	129.71
1,721.0	1.14	359.94	1,720.9	4,571.7	-4.7	-10.5	-4.2	0.06	-0.05	-1.02
1,816.0	0.62	317.75	1,815.9	4,476.7	-3.4	-10.9	-2.9	0.84	-0.55	-44.41
1,911.0	0.75	353.53	1,910.9	4,381.7	-2.4	-11.3	-1.9	0.46	0.14	37.66
2,006.0	0.44	16.03	2,005.9	4,286.7	-1.4	-11.2	-0.9	0.40	-0.33	23.68
2,101.0	0.66	347.64	2,100.8	4,191.8	-0.5	-11.3	0.0	0.36	0.23	-29.88
2,185.0	1.14	23.67	2,184.8	4,107.8	0.7	-11.0	1.2	0.86	0.57	42.89
SURFACE CASING										
2,248.0	0.86	36.19	2,247.8	4,044.8	1.7	-10.5	2.1	0.57	-0.45	19.87
2,291.0	0.70	50.13	2,290.8	4,001.8	2.1	-10.1	2.5	0.57	-0.36	32.42
2,354.0	0.75	53.20	2,353.8	3,938.8	2.6	-9.5	3.0	0.10	0.08	4.87
2,450.0	1.80	22.09	2,449.8	3,842.8	4.4	-8.4	4.7	1.27	1.09	-32.41
KOP										
2,500.0	2.25	12.99	2,499.8	3,792.8	6.0	-7.9	6.4	1.10	0.89	-18.20
2,545.0	2.68	7.50	2,544.7	3,747.9	7.9	-7.6	8.3	1.10	0.96	-12.20
2,640.0	3.25	0.73	2,639.6	3,653.0	12.8	-7.2	13.1	0.70	0.60	-7.13
2,735.0	4.26	13.83	2,734.4	3,558.2	19.0	-6.4	19.2	1.39	1.06	13.79
2,831.0	5.76	9.43	2,830.0	3,462.6	27.2	-4.7	27.3	1.61	1.56	-4.58
2,926.0	6.46	1.88	2,924.5	3,368.1	37.2	-3.8	37.3	1.12	0.74	-7.95
3,021.0	7.73	8.73	3,018.8	3,273.8	48.9	-2.6	48.9	1.60	1.34	7.21
3,116.0	9.18	14.62	3,112.7	3,179.9	62.5	0.3	62.4	1.78	1.53	6.20
3,211.0	10.63	7.85	3,206.3	3,086.3	78.5	3.4	78.3	1.96	1.53	-7.13
3,307.0	12.54	2.23	3,300.3	2,992.3	97.7	5.0	97.4	2.31	1.99	-5.85
3,402.0	10.81	358.98	3,393.4	2,899.2	116.9	5.2	116.6	1.95	-1.82	-3.42
3,497.0	13.16	358.04	3,486.3	2,806.3	136.7	4.7	136.3	2.48	2.47	-0.99
3,593.0	14.37	358.62	3,579.5	2,713.1	159.5	4.0	159.1	1.27	1.26	0.60
3,688.0	14.33	1.00	3,671.6	2,621.0	183.0	4.0	182.7	0.62	-0.04	2.51
3,783.0	12.29	0.82	3,764.0	2,528.6	204.9	4.3	204.5	2.15	-2.15	-0.19
3,878.0	10.37	358.89	3,857.2	2,435.4	223.5	4.3	223.1	2.06	-2.02	-2.03
3,973.0	10.11	353.35	3,950.7	2,341.9	240.4	3.2	240.0	1.07	-0.27	-5.83
4,068.0	9.01	350.89	4,044.3	2,248.3	256.0	1.0	255.7	1.23	-1.16	-2.59
4,163.0	7.34	346.76	4,138.4	2,154.2	269.3	-1.5	269.1	1.86	-1.76	-4.35
4,258.0	5.76	343.86	4,232.7	2,059.9	279.7	-4.3	279.7	1.70	-1.66	-3.05
4,354.0	4.26	334.10	4,328.4	1,964.2	287.6	-7.2	287.6	1.79	-1.56	-10.17
4,448.0	2.81	337.79	4,422.2	1,870.4	292.9	-9.6	293.0	1.56	-1.54	3.93
4,544.0	2.02	295.43	4,518.1	1,774.5	295.8	-12.0	296.0	1.97	-0.82	-44.12
4,639.0	1.58	227.40	4,613.1	1,679.5	295.6	-14.4	295.9	2.15	-0.46	-71.61
4,734.0	1.23	177.04	4,708.1	1,584.5	293.7	-15.4	294.1	1.30	-0.37	-53.01
4,829.0	0.97	236.28	4,803.0	1,489.6	292.2	-16.0	292.6	1.17	-0.27	62.36
4,925.0	2.29	215.54	4,899.0	1,393.6	290.2	-17.8	290.7	1.48	1.37	-21.60
5,020.0	1.27	180.82	4,994.0	1,298.6	287.6	-18.9	288.2	1.52	-1.07	-36.55
5,115.0	1.10	154.19	5,088.9	1,203.7	285.7	-18.5	286.3	0.60	-0.18	-28.03
5,210.0	1.80	203.58	5,183.9	1,108.7	283.6	-18.7	284.1	1.44	0.74	51.99
5,305.0	0.44	242.70	5,278.9	1,013.7	282.0	-19.6	282.6	1.56	-1.43	41.18
5,400.0	1.49	206.40	5,373.9	918.7	280.7	-20.5	281.4	1.23	1.11	-38.21
5,496.0	1.58	178.45	5,469.8	822.8	278.3	-21.0	279.0	0.78	0.09	-29.11
5,591.0	0.66	150.94	5,564.8	727.8	276.5	-20.7	277.2	1.10	-0.97	-28.96
5,686.0	0.88	219.32	5,659.8	632.8	275.5	-20.9	276.1	0.93	0.23	71.98
5,781.0	2.20	225.38	5,754.8	537.8	273.6	-22.7	274.4	1.40	1.39	6.38

## Survey Report



<b>Company:</b>	BILL BARRETT CORPORATION	<b>Local Co-ordinate Reference:</b>	Well #14-7D-45 BTR
<b>Project:</b>	UTAH (DUCHESNE COUNTY - NAD 83)	<b>TVD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Site:</b>	SEC. 7 T4S R5W U.S.B. & M.	<b>MD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Well:</b>	#14-7D-45 BTR	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB# 2009-172	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	UTAH (DUCHESNE COUNTY - NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

<b>Site</b>	SEC. 7 T4S R5W U.S.B. & M.		
<b>Site Position:</b>		<b>Northing:</b>	7,224,306.74 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,920,239.31 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"
		<b>Latitude:</b>	40° 8' 53.858 N
		<b>Longitude:</b>	110° 29' 56.180 W
		<b>Grid Convergence:</b>	0.64 °

<b>Well</b>	#14-7D-45 BTR		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b> 7,221,910.18 usft
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b> 1,921,353.40 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40° 8' 30.051 N
		<b>Longitude:</b>	110° 29' 42.180 W
		<b>Ground Level:</b>	6,277.6 usft

<b>Wellbore</b>	JOB# 2009-172				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	27/03/2013	11.27	65.75	52,080

<b>Design</b>	FINAL SURVEYS				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	357.46	

<b>Survey Program</b>	<b>Date</b>	13/04/2013			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
195.0	8,159.0	FINAL SURVEYS (JOB# 2009-172)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>Subsea Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>
0.0	0.00	0.00	0.0	6,292.6	0.0	0.0	0.0	0.00	0.00	0.00
195.0	0.48	162.80	195.0	6,097.6	-0.8	0.2	-0.8	0.25	0.25	0.00
286.0	0.57	210.62	286.0	6,006.6	-1.5	0.1	-1.5	0.48	0.10	52.55
378.0	0.66	197.52	378.0	5,914.6	-2.4	-0.3	-2.4	0.18	0.10	-14.24
470.0	0.92	212.02	470.0	5,822.6	-3.6	-0.8	-3.5	0.35	0.28	15.76
562.0	1.10	204.64	562.0	5,730.6	-5.0	-1.6	-4.9	0.24	0.20	-8.02
653.0	0.26	291.21	653.0	5,639.6	-5.7	-2.1	-5.6	1.23	-0.92	95.13
744.0	0.40	281.28	744.0	5,548.6	-5.6	-2.6	-5.5	0.17	0.15	-10.91
804.0	0.66	272.32	804.0	5,488.6	-5.5	-3.2	-5.4	0.45	0.43	-14.93
865.0	0.44	258.96	865.0	5,427.6	-5.6	-3.8	-5.4	0.42	-0.36	-21.90
960.0	0.57	263.79	959.9	5,332.7	-5.7	-4.6	-5.5	0.14	0.14	5.08
1,055.0	0.66	254.74	1,054.9	5,237.7	-5.9	-5.6	-5.6	0.14	0.09	-9.53
1,150.0	0.97	262.38	1,149.9	5,142.7	-6.1	-6.9	-5.8	0.35	0.33	8.04



## Survey Report



<b>Company:</b>	BILL BARRETT CORPORATION	<b>Local Co-ordinate Reference:</b>	Well #14-7D-45 BTR
<b>Project:</b>	UTAH (DUCHESNE COUNTY - NAD 83)	<b>TVD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Site:</b>	SEC. 7 T4S R5W U.S.B. & M.	<b>MD Reference:</b>	KB @ 6292.6usft (PATTERSON 506)
<b>Well:</b>	#14-7D-45 BTR	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB# 2009-172	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,877.0	1.71	226.44	5,850.7	441.9	271.3	-25.0	272.2	0.51	-0.51	1.10
5,972.0	1.32	187.68	5,945.7	346.9	269.3	-26.2	270.2	1.13	-0.41	-40.80
6,067.0	0.35	94.86	6,040.7	251.9	268.2	-26.1	269.1	1.45	-1.02	-97.71
6,162.0	1.41	98.73	6,135.7	156.9	268.0	-24.6	268.8	1.12	1.12	4.07
6,257.0	1.67	163.42	6,230.6	62.0	266.5	-23.1	267.2	1.75	0.27	68.09
6,352.0	0.75	189.79	6,325.6	-33.0	264.5	-22.8	265.3	1.11	-0.97	27.76
6,447.0	0.35	296.31	6,420.6	-128.0	264.0	-23.1	264.8	0.96	-0.42	112.13
6,542.0	0.57	184.42	6,515.6	-223.0	263.7	-23.4	264.5	0.81	0.23	-117.78
6,637.0	0.40	325.23	6,610.6	-318.0	263.5	-23.7	264.3	0.96	-0.18	148.22
6,733.0	0.44	297.63	6,706.6	-414.0	264.0	-24.2	264.8	0.21	0.04	-28.75
6,828.0	1.71	221.78	6,801.6	-509.0	263.1	-25.4	263.9	1.75	1.34	-79.84
6,923.0	0.92	173.00	6,896.6	-604.0	261.3	-26.3	262.2	1.37	-0.83	-51.35
7,018.0	1.14	170.98	6,991.6	-699.0	259.6	-26.0	260.5	0.23	0.23	-2.13
7,113.0	1.36	174.05	7,086.5	-793.9	257.5	-25.8	258.4	0.24	0.23	3.23
7,208.0	1.23	161.84	7,181.5	-888.9	255.4	-25.4	256.3	0.32	-0.14	-12.85
7,303.0	0.97	178.10	7,276.5	-983.9	253.6	-25.0	254.5	0.43	-0.27	17.12
7,399.0	1.41	191.37	7,372.5	-1,079.9	251.7	-25.2	252.5	0.54	0.46	13.82
7,494.0	1.45	170.98	7,467.4	-1,174.8	249.3	-25.3	250.2	0.53	0.04	-21.46
7,589.0	1.10	181.17	7,562.4	-1,269.8	247.2	-25.1	248.1	0.44	-0.37	10.73
7,684.0	1.76	197.34	7,657.4	-1,364.8	244.9	-25.5	245.8	0.81	0.69	17.02
7,779.0	0.97	186.76	7,752.4	-1,459.8	242.7	-26.1	243.7	0.87	-0.83	-11.14
7,874.0	1.93	193.57	7,847.3	-1,554.7	240.4	-26.5	241.3	1.02	1.01	7.17
7,969.0	2.15	198.84	7,942.3	-1,649.7	237.2	-27.5	238.1	0.30	0.23	5.55
8,064.0	2.37	197.96	8,037.2	-1,744.6	233.6	-28.7	234.6	0.23	0.23	-0.93
8,104.0	2.41	199.55	8,077.2	-1,784.6	232.0	-29.2	233.1	0.19	0.10	3.97
<b>PROJECTION TO TD</b>										
<b>8,159.0</b>	<b>2.47</b>	<b>201.74</b>	<b>8,132.1</b>	<b>-1,839.5</b>	<b>229.8</b>	<b>-30.0</b>	<b>230.9</b>	<b>0.20</b>	<b>0.11</b>	<b>3.98</b>

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - #14-7D-45 BTR	0.00	0.00	8,594.6	277.2	-12.3	7,222,187.25	1,921,337.99	40° 8' 32.791 N	110° 29' 42.338 W
- hit/miss target									
- Shape									
- survey misses target center by 465.2usft at 8159.0usft MD (8132.1 TVD, 229.8 N, -30.0 E)									
- Rectangle (sides W200.0 H200.0 D0.0)									

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,248.0	2,247.8	1.7	-10.5	SURFACE CASING	
2,500.0	2,499.8	6.0	-7.9	KOP	
8,159.0	8,132.1	229.8	-30.0	PROJECTION TO TD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

**14-7D-45 BTR 4/1/2013 06:00 - 4/2/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	12.00	18:00	1	RIGUP & TEARDOWN	MOVE RIG FROM 5-7D-45 BTR T/14-7D 45 BTR R/U SUBSTRUCTURE PUT DERRICK ON FLOOR SET MUD PUMPS IN PLACE BOILER, PITS, LIGHT PLANT, CEMENT SILO, 400 UPRIGHT GAS BUSTER WATER TANK SET DOG HOUSE IN PLACE
18:00	12.00	06:00	1	RIGUP & TEARDOWN	WAIT ON DAY LIGHTS

**14-7D-45 BTR 4/2/2013 06:00 - 4/3/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	17.50	23:30	1	RIGUP & TEARDOWN	RASIE DERRICK, RIG UP FLOOR, FILL PITS, RIG UP FLARE LINES, SET CAT WALK AND BEAVER SLIDE, MAKE UP KELLY, PICK UP DIRECTIONAL TOOLS SPUD RUN PASON LINES,
23:30	4.00	03:30	20	DIRECTIONAL WORK	PICK UP DIRECTIONAL TOOLS SCRIBE PICK REMAERS, SHOCK SUB AND M/U BIT
03:30	2.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 93' -130'

**14-7D-45 BTR 4/3/2013 06:00 - 4/4/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	11.00	17:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 130'-718'
17:00	0.50	17:30	7	LUBRICATE RIG	RIG SERVICE
17:30	3.50	21:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 718'- 930' WOB 20 SPM #1 90 SPM #2 90 ROP 60.57
21:00	0.50	21:30	21	OPEN	INSTALL ROTATING HEAD
21:30	8.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 930' - 1405' WOB 20 SPM #1 90 SPM #2 90 ROP 55.88

**14-7D-45 BTR 4/4/2013 06:00 - 4/5/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	9.50	15:30	2	DRILL ACTUAL	STEERABLE DRILLING F/ 1405'-1944' WOB 20 RPM 40 SPM #1 90 SPM #2 90 ROP 56.73
15:30	0.50	16:00	7	LUBRICATE RIG	RIG SERVICE
16:00	6.00	22:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 1944'-2250 WOB 20 RPM 40 SPM #1 90 SPM #2 90 ROP 51.00
22:00	2.00	00:00	5	COND MUD & CIRC	CIRC SWEEPS PUMP DRY JOB
00:00	2.00	02:00	6	TRIPS	WIPER TRIP
02:00	1.50	03:30	5	COND MUD & CIRC	CIRC SWEEP/MIX AND PUMP DRY JOB
03:30	2.50	06:00	6	TRIPS	TOOH LD 8" DIRC TOOLS

**14-7D-45 BTR 4/5/2013 06:00 - 4/6/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------



# Bill Barrett Corporation

## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.50	07:30	20	DIRECTIONAL WORK	LD DIRC TOOLS
07:30	5.50	13:00	12	RUN CASING & CEMENT	RIG UP WEATHERFORD AND RUN 9 5/8 CASING TO 2249'
13:00	2.00	15:00	5	COND MUD & CIRC	CIRC AND RIG UP HALLIBURTON
15:00	3.00	18:00	12	RUN CASING & CEMENT	CEMENT WITH HALLIBURTON FILL LINES TEST TO 5000 PSI PUMP 20 BBLS FRESH WATER 40 BBLS SUPER FLUSH @ 10 # PUMP 20 BBLS FRESH WATER PUMP LEAD CEMENT (191 BBLS @ 11# 3.16 Y 19.48 WR 340 SKS) PUMP TAIL CEMENT (56 BBLS @ 14# 1.33 Y 6.31 WR 240 SKS) DROP PLUG DISPLACE FIRST 10 BBLS WATER DISPLACE 170.2 BBLS MUD @ 9.5# LAST 20 BBLS WATER BUMP PLUG @ 1197 PSI 500 OVER 120 BBLS BACK TO SURFACE
18:00	1.00	19:00	13	WAIT ON CEMENT	WOC
19:00	1.00	20:00	12	RUN CASING & CEMENT	TOP JOB 75 SKS 15 BBL G NEAT @ 15.8 PPG, 1.17 YIELD, 5.02 GPS PUMPED 12 BBLS CMT. FELL 5' PUMPED 3 BBL
20:00	2.00	22:00	13	WAIT ON CEMENT	WOC
22:00	5.50	03:30	14	NIPPLE UP B.O.P	NIPPLE DOWN CONDUCTER CUT OFF CASING AND WELD ON HEAD
03:30	2.50	06:00	14	NIPPLE UP B.O.P	NIPPLE UP BOP

## 14-7D-45 BTR 4/6/2013 06:00 - 4/7/2013 06:00

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	14	NIPPLE UP B.O.P	NIPPLE UP BOP
08:30	4.50	13:00	15	TEST B.O.P	HELD SAFTEY MEETING TEST B.O.Ps LOW 250 HIGH 5000 LOWER KELLY VALVE, UPPER KELLY VALVE, DART VALVE PIPE RAMS AND INSIDE VLAVES (PIPE RAMS, HCR & OUT SIDE KILL LINE) (PIPE RAMS, CHOKE LINE, CHECK VALVE UPRIGHT GAGE VALVE & INSIDE MANIFOLD VALVES) BLIND RAMS, CHOKE LINES & MANIFOLD VALVES TEST ANNULAR, BLIND RAMS AND SUPER CHOKE LOW 5 MINS HIGH 10 MINS CASING 1500 PSI 30 MINS (TESTERS NAME & COMPANY E. WATKINS WITH B&C QUICK TEST)
13:00	0.50	13:30	22	OPEN	SET WEAR BUSHING
13:30	1.50	15:00	20	DIRECTIONAL WORK	PU BHA AND ORIENT DIRC TOOLS
15:00	3.00	18:00	6	TRIPS	TIH TO 2204' TAG CEMENT @2202'
18:00	1.00	19:00	22	OPEN	DRILL FLOAT EQUIP
19:00	0.50	19:30	2	DRILL ACTUAL	DRILL 2250-2261
19:30	0.50	20:00	7	LUBRICATE RIG	RIG SERVICE
20:00	0.50	20:30	2	DRILL ACTUAL	DRILL 2261-2270
20:30	0.50	21:00	22	OPEN	FIT 10.5 EMW 160 PSI f/ 30 min.
21:00	9.00	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 2270'-2854' WOB 15 RPM 40 SPM #1 85 SPM #2 85 ROP 64.88

## 14-7D-45 BTR 4/7/2013 06:00 - 4/8/2013 06:00

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	9.50	15:30	2	DRILL ACTUAL	STEERABLE DRILLING F/ 2854'-3363' WOB 15 RPM 40 SPM #1 80 SPM #2 80 ROP 53.57
15:30	0.50	16:00	7	LUBRICATE RIG	RIG SERVICE HELD BOP DRILL 1.5 min FCN PIPE RAMS
16:00	3.00	19:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 3363'-3503 WOB 15 RPM 40 SPM #1 65 SPM #2 65 ROP 46.66

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
19:00	3.00	22:00	5	COND MUD & CIRC	LOST COMPLETE RETURNS @ 3503 PUMP LCM SWEEPS RAISE LCM CONTENT TO 21% IN ACTIVE
22:00	8.00	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 3503'-3870' WOB 15 RPM 40 SPM #1 65 SPM #2 65 ROP 45.87

**14-7D-45 BTR 4/8/2013 06:00 - 4/9/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	STEERABLE DRILLING F/ 3870'-4282' WOB 15 RPM 40 SPM #1 65 SPM #2 65 ROP 41.20
16:00	0.50	16:30	7	LUBRICATE RIG	RIG SERVICE
16:30	0.50	17:00	2	DRILL ACTUAL	STEERABLE DRILLING F/4282'-4313 WOB 15 RPM 40 SPM #1 65 SPM #2 65 ROP 62.0
17:00	0.50	17:30	21	OPEN	CHECK FLOW/WORK ON FLOW SENSOR NO FLOW
17:30	12.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/4313'-4853' WOB 18 RPM 40 SPM #1 75 SPM #2 75 ROP 43.2

**14-7D-45 BTR 4/9/2013 06:00 - 4/10/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	STEERABLE DRILLING F/4853'-5202" WOB 18 RPM 40 SPM #1 75 SPM #2 75 ROP 34.9
16:00	0.50	16:30	7	LUBRICATE RIG	RIG SERVICE
16:30	13.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/5202'-5741' WOB 18 RPM 40 SPM #1 75 SPM #2 75 ROP 39.93

**14-7D-45 BTR 4/10/2013 06:00 - 4/11/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	STEERABLE DRILLING F/5710'-6059 WOB 20 RPM 40 SPM #1 70 SPM #2 70 ROP 34.9
16:00	0.50	16:30			RIG SERVICE

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
16:30	13.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/6059'-6582 WOB 20 RPM 40 SPM #1 75 SPM #2 75 ROP 38.74

**14-7D-45 BTR 4/11/2013 06:00 - 4/12/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	STEERABLE DRILLING F/6582'-6915 WOB 20 RPM 40 SPM #1 75 SPM #2 75 ROP 33.3
16:00	0.50	16:30	7	LUBRICATE RIG	RIG SERVICE
16:30	13.50	06:00	2	DRILL ACTUAL	STEERABLE DRILLING F/6915'-7485' WOB 20 RPM 40 SPM #1 75 SPM #2 75 ROP 42.2

**14-7D-45 BTR 4/12/2013 06:00 - 4/13/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.50	16:30	2	DRILL ACTUAL	STEERABLE DRILLING F/7485'-7868 WOB 20 RPM 40 SPM #1 75 SPM #2 75 ROP 36.47
16:30	0.50	17:00	7	LUBRICATE RIG	RIG SERVICE
17:00	8.50	01:30	2	DRILL ACTUAL	STEERABLE DRILLING F/7868'-8159' WOB 22 RPM 43 SPM #1 75 SPM #2 75 ROP 34.23
01:30	1.50	03:00	5	COND MUD & CIRC	CIRC SWEEPS PUMP DRY JOB
03:00	3.00	06:00	6	TRIPS	WIPER TRIP TO SHOE

**14-7D-45 BTR 4/13/2013 06:00 - 4/14/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	6	TRIPS	TIH TO 5840'
09:00	1.50	10:30	5	COND MUD & CIRC	FILL PIPE AND CIRC OUT GAS
10:30	2.00	12:30	6	TRIPS	TIH TO 8159'
12:30	2.00	14:30	5	COND MUD & CIRC	PUMP SWEEP AND CIRC OUT GAS
14:30	5.50	20:00	6	TRIPS	TOOH f/ LOGS
20:00	3.00	23:00	20	DIRECTIONAL WORK	LAYDOWN DIRC. TOOLS
23:00	5.50	04:30	11	WIRELINE LOGS	RIG UP HALLIBURTON RUN WIRELINE LOGS LOGGERS TD 8146'
04:30	1.50	06:00	6	TRIPS	PU BHA /TIH

**14-7D-45 BTR 4/14/2013 06:00 - 4/15/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------



**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	7.00	13:00	6	TRIPS	TIH
13:00	1.50	14:30	5	COND MUD & CIRC	CIRC SWEEP
14:30	8.50	23:00	6	TRIPS	LDDP & BHA
23:00	7.00	06:00	12	RUN CASING & CEMENT	HELD SAFETY MTG.RIG UP WEATHERFORD AND RUN 5.5" PROD. CASING

**14-7D-45 BTR 4/15/2013 06:00 - 4/16/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	5.50	11:30	12	RUN CASING & CEMENT	RUN 194 JNTS. 5.5 17# P-110 PRODUCTION CASING TO 8154'
11:30	0.50	12:00	5	COND MUD & CIRC	CIRC AND RIG UP HALLIBURTON
12:00	4.50	16:30	12	RUN CASING & CEMENT	S/M WITH ON R/U PUMP CEMENT HALLIBURTON TEST LINES PRESURE & TEST TO 5000 PSI PUMP H2O SPACER 2 BBLS PUMP SUPER FLUSH 40 BBLS PUMP 5 BBLS H2O PUMP LEAD CEMENT 281 BBLS @ 11# Y 2.32 GAL/SK 10.57 655 SKS PUMP TAIL CEMENT 144 BBLS 13# Y 1.43 GAL/SK 6.65 SHUT DOWN DROP PLUG DISPLACE 187 BBLS FINAL CIRC PRESSURE 1778 PSI BUMP PLUG 500 OVER HOLD FOR 3 MINS FLOATS HELD NO CEMENT BACK TO SURFACE.LOST RETURNS 110 BBL INTO DISPLACEMENT STAYED AT 2BBL/MIN SUPERFLUSH BACK TO SURFACE
16:30	3.00	19:30	14	NIPPLE UP B.O.P	NIPPLE DOWN BOP/PU 130K 30K OVER ST. WT. SET SLIPS @ 130K/CUT OFF 5-1/2" PROD CSG
19:30	10.50	06:00	21	OPEN	HAVE GAS ON THE BACKSIDE BUILT VENT HOSE KEEPING 50 PSI ON WELLHEAD GAUGE BUILT TO 90PSI IN 30 MIN.

**14-7D-45 BTR 4/16/2013 06:00 - 4/17/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	21	OPEN	MONITER PSI ON WELLHEAD HOLD 50-80 PSI AT LAST BLEED OFF HAD FLUID TO SURFACE
09:00	4.00	13:00	22	OPEN	CUT OFF CASING REMOVE STACK NIPPLE UP TUBING HEAD AND TEST TO 5K RIG RELEASE # 1300 HRS
13:00	17.00	06:00	1	RIGUP & TEARDOWN	RIG DOWN/LAYOVER DERRICK

**14-7D-45 BTR 4/19/2013 06:00 - 4/20/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	TURN CSG VALVES AROUND. REPAIR BROKEN HOLD DOWN PIN AND PACKING GLAND.

**14-7D-45 BTR 4/20/2013 06:00 - 4/21/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	LOGG	Logging	MIRU SLB. HSM. ND NIGHT CAP. RIH W/ GR/JB. TAG AT 8032' (FC AT 8067'), HAVE 35' FILL. RIH W/ CBL/GR/CCL. RUN REPEAT PASS 8032'-7800'. MJ 5527'-5549', 6820'-6842', AND 7518'-7531'. CMT QUALITY SHOWS-- 8032'-7050' GOOD, 7050'-6500' FAIR, 6500'-5310' POOR, 5310'-5000' FAIR, 5000'-4700' POOR, 4700'-3500' VERY POOR, 3500'-3074' POOR. TOC AT 3074'. 9-5/8" SHOE AT 2249'. HAVE 350 PSI ON SURFACE CSG. CBL RAN WITH PRESSURE.

**14-7D-45 BTR 5/17/2013 06:00 - 5/18/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	SET FBT. SET FB EQUIP AND PLUMB IN. START SETTING FRAC LINE.

**14-7D-45 BTR 5/18/2013 06:00 - 5/19/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	CHECK PRESSURE. ND NIGHT CAP. NU FRAC MANDREL, 5" 10K FRAC VALVES, FRAC HEAD. PRES TEST CSG, MANDREL, VALVES TO 8450. PRES TEST FB EQUIP 500/ 2400/ 4500. FINISH SETTING FRAC LINE. FILLING FRAC LINE.

**14-7D-45 BTR 5/19/2013 06:00 - 5/20/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FILLING FRAC LINE.

**14-7D-45 BTR 5/20/2013 06:00 - 5/21/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	HEAT FRAC LINE.

**14-7D-45 BTR 5/21/2013 06:00 - 5/22/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.
07:00	2.00	09:00	SRIG	Rig Up/Down	HSM. DISCUSS AND SPOT EQUIP FOR DRIVE THRU. RU EQUIP.
09:00	1.50	10:30	PFRT	Perforating	ALL PERFS CORRELATED TO HES DSN/SD/DL LOG DATED 4/13/113 AND SLB CBL/GR/CCL DATED 4/24/13, GUNS ARE 3-1/8" EXP WITH 3104 PJO, 23 GR, .38" EHD, 36" PENT, 3 SPF ON 120" PHASING.  PU PERF GUNS FOR STG 1 INTO LUBE. 0 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7518'-7541'. RUN DOWN AND PERF CR-4, CR-4A, AND CR-5 FORM WITH 57 HOLES IN 19' NET. POOH AND VERIFY ALL PERFS SHOT. SHUT WELL IN AND SECURE FOR NIGHT.
10:30	5.00	15:30	SRIG	Rig Up/Down	MIRU HES FRAC FLEET.
15:30	14.50	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

**14-7D-45 BTR 5/22/2013 06:00 - 5/23/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.00	06:00	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.
06:00	0.00	06:00	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.



# Bill Barrett Corporation

## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.84	06:50	FRAC	Frac. Job	<p>Frac Stage 1. Fluid System: Hybor G 16  Open Well, 0 Psi. ICP. BrokeDown At 9.7 Bpm And 3,000 Psi..  Pump 3900 Gals. 15% HCL And 114 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 70.6 Bpm And 3,572 Psi., Get ISIP, 2,360 Psi.. 0.74 Psi./Ft. F.G.. 42/57 Holes.  Con't With SlickWater Pad, 45,153 Gals..  Stage Into Hybor Pad, 70.3 Bpm At 3,549 Psi..  On Perfs, 70.3 Bpm At 4,104 Psi., 11,346 Gals.  Stage Into 2.0# 20/40 White Prop, 70.1 Bpm At 3,861 Psi..  On Perfs, 70.2 Bpm At 3,525 Psi., 8,668 Gals.  Stage Into 3.0# 20/40 White Prop, 69.9 Bpm At 3,420 Psi..  On Perfs, 68.9 Bpm At 3,170 Psi., 18,665 Gals.  Stage Into 3.5# 20/40 White Prop, 70.3 Bpm At 3,177 Psi..  On Perfs, 70.2 Bpm At 3,110 Psi., 9,685 Gals.  Stage Into 4.0# 20/40 White Prop, 70.2 Bpm At 3,101 Psi..  On Perfs, 70.2 Bpm At 3,044 Psi., 10,047 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 2,360 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 140,500#  Total Clean - 124,506 Gals.. 2,964 Bbls..  Produced Water - 64,143 Gals..  2% KCL - 58,411 Gals..  BWTR - 3,107 Bbls.  Max. Rate - 70.3 Bpm  Avg. Rate - 70.2 Bpm  Max. Psi. - 3,869 Psi.  Avg. Psi. - 3,282 Psi.</p>
06:50	0.17	07:00	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
07:00	1.25	08:15	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013.  Found And Correlated To Short Joint At 7,518 - 7,531'.  Drop Down To Depth, Set CBP At 7,976'. 2,050 Psi.  Perforate Stage 2 CR-4/CR-3 Zone, 7,419 - 7,656'.45 Holes. 2,050 Psi.  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
08:15	0.16	08:25	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
08:25	1.08	09:30	FRAC	Frac. Job	<p>Frac Stage 2. Fluid System: Hybor G 16  Open Well, 1,863 Psi. ICP. BrokeDown At 10.0 Bpm And 2,693 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.6 Bpm And 3,960 Psi., Get ISIP, 2,136 Psi.. 0.72 Psi./Ft. F.G.. 39/45 Holes.  Con't With SlickWater Pad, 48,118 Gals..  Stage Into Hybor Pad, 72.2 Bpm At 3,750 Psi..  On Perfs, 72.1 Bpm At 3,941 Psi., 12,158 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,977 Psi..  On Perfs, 72.1 Bpm At 3,581 Psi., 8,431 Gals.  Stage Into 3.0# 20/40 White Prop, 72.1 Bpm At 3,562 Psi..  On Perfs, 72.1 Bpm At 3,272 Psi., 22,858 Gals.  Stage Into 3.5# 20/40 White Prop, 72.1 Bpm At 3,219 Psi..  On Perfs, 72.1 Bpm At 3,143 Psi., 9,393 Gals.  Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 3,127 Psi..  On Perfs, 72.3 Bpm At 3,097 Psi., 10,079 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 2,284 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 150,300#  Total Clean - 130,916 Gals.. 3,117 Bbls..  Produced Water - 66,169 Gals..  2% KCL - 62,919 Gals..  BWTR - 3,269 Bbls.  Max. Rate - 72.3 Bpm  Avg. Rate - 72.1 Bpm  Max. Psi. - 3,983 Psi.  Avg. Psi. - 3,325 Psi.</p>
09:30	0.17	09:40	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
09:40	1.00	10:40	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 6,820 - 6,842'. Drop Down To Depth, Set CBP At 7,406'. 1,850 Psi. Perforate Stage 3 CR-3/CR-2 Zone, 7,113 - 7,386'. 45 Holes. 1,950 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
10:40	0.08	10:45	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
10:45	1.09	11:50	FRAC	Frac. Job	Frac Stage 3. Fluid System: Hybor G 16 Open Well, 1,778 Psi. ICP. BrokeDown At 10.6 Bpm And 2,036 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 72.7 Bpm And 4,385 Psi., Get ISIP, 1,980 Psi.. 0.71 Psi./Ft. F.G.. 38/45 Holes. Con't With SlickWater Pad, 51,364 Gals.. Stage Into Hybor Pad, 71.9 Bpm At 3,655 Psi.. On Perfs, 72.4 Bpm At 3,928 Psi., 13,029 Gals. Stage Into 2.0# 20/40 White Prop, 72.2 Bpm At 3,942 Psi.. On Perfs, 72.2 Bpm At 3,558 Psi., 8,056 Gals. Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 3,558 Psi.. On Perfs, 72.3 Bpm At 3,259 Psi., 27,020 Gals. Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 3,083 Psi.. On Perfs, 70.2 Bpm At 2,936 Psi., 9,076 Gals. Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 3,005 Psi.. On Perfs, 72.2 Bpm At 2,984 Psi., 9,510 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 2,260 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured. Total 20/40 White Prop - 160,100# Total Clean - 138,165 Gals.. 3,290 Bbls.. Produced Water - 69,541 Gals.. 2% KCL - 66,691 Gals.. BWTR - 3,460 Bbls. Max. Rate - 72.4 Bpm Avg. Rate - 72.1 Bpm Max. Psi. - 3,946 Psi. Avg. Psi. - 3,229 Psi.
11:50	0.17	12:00	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
12:00	0.92	12:55	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 6,820 - 6,842'. Drop Down To Depth, Set CBP At 7,106'. 1,950 Psi. Perforate Stage 4 CR-2/Wasatch Zone, 6,847 - 7,086'. 45 Holes. 1,800 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
12:55	0.16	13:05	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.



# Bill Barrett Corporation

## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
13:05	1.25	14:20	FRAC	Frac. Job	<p>Frac Stage 4. Fluid System: Hybor G 16  Open Well, 1,698 Psi. ICP. BrokeDown At 9.3 Bpm And 2,528 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.7 Bpm And 3,675 Psi., Get ISIP, 1,617 Psi.. 0.67 Psi./Ft. F.G.. 39/45 Holes.  Con't With SlickWater Pad, 48,121 Gals..  Stage Into Hybor Pad, 72.1 Bpm At 3,163 Psi..  On Perfs, 72.1 Bpm At 3,374 Psi., 12,202 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,370 Psi..  On Perfs, 72.2 Bpm At 3,000 Psi., 7,824 Gals.  Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 2,960 Psi..  On Perfs, 72.3 Bpm At 2,680 Psi., 24,622 Gals.  Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 2,681 Psi..  On Perfs, 72.3 Bpm At 2,658 Psi., 8,805 Gals.  Stage Into 4.0# 20/40 White Prop, 72.3 Bpm At 2,670 Psi..  On Perfs, 72.2 Bpm At 2,637 Psi., 9,611 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,862 Psi.. 0.71 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 150,500#  Total Clean - 130,248 Gals.. 3,101 Bbls..  Produced Water - 65,277 Gals..  2% KCL - 63,064 Gals..  BWTR - 3,261 Bbls.  Max. Rate - 72.4 Bpm  Avg. Rate - 72.2 Bpm  Max. Psi. - 3,414 Psi.  Avg. Psi. - 2,774 Psi.</p>
14:20	0.17	14:30	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
14:30	0.92	15:25	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 5,527' - 5,549'.  Drop Down To Depth, Set CBP At 6,832'. 1,650 Psi.  Perforate Stage 5 CR-1A/CR-1/UteLand Butte Zone, 6,603' - 6,812'. 42 Holes. 1,500 Psi.  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
15:25	0.08	15:30	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
15:30	1.17	16:40	FRAC	Frac. Job	<p>Frac Stage 5. Fluid System: Hybor G 16  Open Well, 1,356 Psi. ICP. BrokeDown At 10.4 Bpm And 1,507 Psi..  Pump 3900 Gals. 15% HCL And 84 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 72.5 Bpm And 3,278 Psi., Get ISIP, 1,622 Psi.. 0.68 Psi./Ft. F.G.. 37/42 Holes.  Con't With SlickWater Pad, 52,827 Gals..  Stage Into .75# 100 Mesh Pad, 72.5 Bpm At 3,085 Psi..  On Perfs, 72.3 Bpm At 3,156 Psi., 19,920 Gals.  Stage Into 1.0# 20/40 White Prop, 72.2 Bpm At 3,189 Psi..  On Perfs, 72.1 Bpm At 3,094 Psi., 7,462 Gals.  Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 3,059 Psi..  On Perfs, 72.1 Bpm At 2,900 Psi., 7,511 Gals.  Stage Into 3.0# 20/40 White Prop, 72.2 Bpm At 2,882 Psi..  On Perfs, 72.1 Bpm At 2,717 Psi., 27,895 Gals.  Stage Into 3.5# 20/40 White Prop, 72.2 Bpm At 2,652 Psi..  On Perfs, 72.0 Bpm At 2,611 Psi., 8,476 Gals.  Stage Into 4.0# 20/40 White Prop, 72.1 Bpm At 2,609 Psi..  On Perfs, 72.1 Bpm At 2,581 Psi., 8,918 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,841 Psi.. 0.71 Psi./Ft. F.G.. WSI And Secured.  100 Mesh - 15,000#  Total 20/40 White Prop - 165,000#  Total Clean - 151,330 Gals.. 3,603 Bbls..  Produced Water - 69,267 Gals.  2% KCL - 80,182 Gals..  BWTR - 3,789 Bbls.  Max. Rate - 72.7 Bpm  Avg. Rate - 71.6 Bpm  Max. Psi. - 3,201 Psi.  Avg. Psi. - 2,850 Psi.</p>
16:40	0.16	16:50	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
16:50	1.00	17:50	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 16 Gms., .44 Dia. Holes. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 5,527 - 5,549'. Drop Down To Depth, Set CBP At 6,594'. 1,500 Psi. Perforate Stage 6 Castle Peak/Black Shale Zone, 6,293 - 6,579'. 45 Holes. 1,300 Psi. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
17:50	0.08	17:55	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
17:55	1.17	19:05	FRAC	Frac. Job	Frac Stage 6. Fluid System: Hybor G 16 Open Well, 1,356 Psi. ICP. BrokeDown At 10.4 Bpm And 1,350 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 72.4 Bpm And 3,430 Psi., Get ISIP, 1,257 Psi.. 0.63 Psi./Ft. F.G.. 37/45 Holes. Con't With SlickWater Pad, 52,960 Gals.. Stage Into .75# 100 Mesh Pad, 72.4 Bpm At 2,612 Psi.. On Perfs, 72.4 Bpm At 2,517 Psi., 20,133 Gals. Stage Into 1.0# 20/40 White Prop, 72.2 Bpm At 2,789 Psi.. On Perfs, 72.2 Bpm At 2,669 Psi., 7,213 Gals. Stage Into 2.0# 20/40 White Prop, 72.1 Bpm At 2,640 Psi.. On Perfs, 72.1 Bpm At 2,448 Psi., 7,337 Gals. Stage Into 3.0# 20/40 White Prop, 72.1 Bpm At 2,426 Psi.. On Perfs, 72.2 Bpm At 2,252 Psi., 28,832 Gals. Stage Into 3.5# 20/40 White Prop, 72.4 Bpm At 2,221 Psi.. On Perfs, 72.2 Bpm At 2,176 Psi., 8,299 Gals. Stage Into 4.0# 20/40 White Prop, 72.3 Bpm At 2,178 Psi.. On Perfs, 72.2 Bpm At 2,145 Psi., 10,715 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,482 Psi.. 0.67 Psi./Ft. F.G.. WSI And Secured. 100 Mesh - 15,200# Total 20/40 White Prop - 165,300# Total Clean - 153,348 Gals.. 3,651 Bbls.. Produced Water - 68,920 Gals. 2% KCL - 82,529 Gals.. BWTR - 3,839 Bbls. Max. Rate - 72.6 Bpm Avg. Rate - 72.3 Bpm Max. Psi. - 2,873 Psi. Avg. Psi. - 2,396 Psi.
19:05	0.25	19:20	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun CBP Plug Assembly. Equalize To Well Pressure.
19:20	0.67	20:00	PFRT	Perforating	RIH With 3 1/8" Sinker Bar And CBP Plug Assembly. Correlating To HES Dual Spaced Neutron/Spectral Density Dated 04-13-2013 And SLB CBL/CCL Dated 04-24-2013. Found And Correlated To Short Joint At 5,527 - 5,549'. Drop Down To Depth, Set CBP At 6,250'. 1,350 Psi. Bleed Pressure Off Well. POOH. LayDown Tools, WSI And Secured.
20:00	2.50	22:30	SRIG	Rig Up/Down	RigDown WireLine And Frac Crews, MOL.
22:30	7.50	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured.

**14-7D-45 BTR 5/24/2013 06:00 - 5/25/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	1.00	08:00	SRIG	Rig Up/Down	MIRU RIG & EQUIPMENT.
08:00	3.00	11:00	BOPI	Install BOP's	SIWP- 0. N/D FRAC TREE. N/U BOP & HYDRILL. R/U FLOOR & EQUIPMENT. SPOT CATWALK & PIPE RACKS. LOAD 262 JTS ON RACKS & TALLY TBG.
11:00	3.50	14:30	RUTB	Run Tubing	P/U 4-3/4 BIT, POBS, 1 JT 2-7/8 TBG & 2.31 XN- NIPPLE. RIH P/U 2-7/8 L-80 TBG TO KILL PLUG @ 6250'

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
14:30	3.50	18:00	DOPG	Drill Out Plugs	R/U POWER SWIVEL. BREAK CIRC. TEST CIRC EQUIPMENT & BOPE TO 2500 PSI, HELD.  D/O KILL PLUG @ 6250'. FCP- 650 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6576'. C/O SAND & D/O CBP @ 6594'. FCP- 750 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6777'. C/O SAND & D/O CBP @ 6832'. FCP- 650 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 6951'. C/O SAND & D/O CBP @ 7106'. FCP- 600 ON 28/64 CHOKE. CIRC WELL CLEAN. R/D SWIVEL. SDFN. TURN WELL OVER TO FLOW BACK. SDFN.
18:00	12.00	06:00	LOCL	Lock Wellhead & Secure	WELL SECURE. CREW TRAVEL.

**14-7D-45 BTR 5/25/2013 06:00 - 5/26/2013 06:00**

API/UWI 43013512220000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 2,250.0	Primary Job Type Drilling & Completion
---------------------------	----------------------	--------------------	--------------------------------	--------------------------	-------------------------------	-------------------------------------------

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	5.50	12:30	DOPG	Drill Out Plugs	FCP- 300 ON 20/64 CHOKE. SWIVEL IN HOLE, TAG SAND @ 7331'. BREAK CIRC. C/O SAND & D/O CBP @ 7406'. FCP- 300 ON 32/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7562'. C/O SAND & D/O CBP @ 7676'. FCP- 150 ON 64/64 CHOKE.  SWIVEL IN HOLE, TAG SAND @ 7954'. C/O TO FLOAT COLLAR @ 8067'. D/O F/C. D/O CMT TO 8139' PBTD. JT 256 ALL THE WAY IN. CIRC WELL CLEAN. PUMPED 350 BBLS TOTAL. R/D SWIV
12:30	1.00	13:30	PULT	Pull Tubing	PULL ABOVE PERFS L/D 2-7/8 TBG TO 6211' & LAND TBG. 195 JTS TOTAL IN HOLE.
13:30	1.50	15:00			R/D FLOOR. N/D BOPE. N/U WELLHEAD. DROP BALL DOWN TBG & PUMPED BIT OFF. R/U TO SALES LINE. TURN OVER TO FLOW BACK.
15:00	2.00	17:00			R/D RIG & EQUIPMENT. MOL. SDFN.  NOTE- 67 JTS ON LOCATION.
17:00	13.00	06:00	LOCL	Lock Wellhead & Secure	WELL SECURE. CREW TRAVEL.

Effective Date: 11/1/2016

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
Bill Barrett Corporation 1099 18th Street, Suite 2300 Denver, CO 80202	Rig II, LLC 1582 West 2600 South Woods Cross, UT 84087
CA Number(s):	Unit(s):

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

**OPERATOR CHANGES DOCUMENTATION:**

1. Sundry or legal documentation was received from the **FORMER** operator on: 10/21/2016
2. Sundry or legal documentation was received from the **NEW** operator on: 10/21/2016
3. New operator Division of Corporations Business Number: 8256968-0160

**REVIEW:**

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
2. Receipt of Acceptance of Drilling Procedures for APD on: 10/21/2016
3. Reports current for Production/Disposition & Sundries: 11/2/2016
4. OPS/SI/TA well(s) reviewed for full cost bonding: 11/3/2016
5. UIC5 on all disposal/injection/storage well(s) approved on: 11/3/2016
6. Surface Facility(s) included in operator change: None
7. Inspections of PA state/fee well sites complete on (only upon operators request): 11/3/2016

**NEW OPERATOR BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UTB000712
2. Indian well(s) covered by Bond Number: LPM 922467
3. State/fee well(s) covered by Bond Number(s): 9219529

**DATA ENTRY:**

1. Well(s) update in the **OGIS** on: 11/7/2016
2. Entity Number(s) updated in **OGIS** on: 11/7/2016
3. Unit(s) operator number update in **OGIS** on: N/A
4. Surface Facilities update in **OGIS** on: N/A
5. State/Fee well(s) attached to bond(s) in **RBDMS** on: 11/7/2016
6. Surface Facilities update in **RBDMS** on: N/A

**COMMENTS:**

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral	Surface	Type	Status
SWD 9-36 BTR	9	030S	060W	4301350646	18077	Indian	Fee	WD	A
16-6D-46 BTR SWD	6	040S	060W	4301350781	18327	Indian	Fee	WD	A
6-32-36 BTR SWD	32	030S	060W	4301350921	18329	Indian	Fee	WD	A
LC TRIBAL 8-26D-47	26	040S	070W	4301334024		Indian	Indian	OW	APD
16-21D-37 BTR	21	030S	070W	4301350758		Indian	Fee	OW	APD
14-11D-37 BTR	11	030S	070W	4301350862		Indian	Fee	OW	APD
7-17D-46 BTR	17	040S	060W	4301350883		Indian	Indian	OW	APD
14-12D-37 BTR	12	030S	070W	4301350894		Indian	Fee	OW	APD
1-18D-36 BTR	18	030S	060W	4301350922		Indian	Fee	OW	APD
13-2D-45 BTR	2	040S	050W	4301350931		Indian	Indian	OW	APD
5H-16-46 BTR	16	040S	060W	4301350992		Indian	Indian	OW	APD
9H-17-45 BTR	17	040S	050W	4301351098		Indian	Indian	OW	APD
13H-8-46 BTR UB	8	040S	060W	4301351124		Indian	Indian	OW	APD
8H-9-46 BTR	9	040S	060W	4301351140		Indian	Indian	OW	APD
LC TRIBAL 7-31D-37	31	030S	070W	4301351147		Indian	Fee	OW	APD
14-16D-45 BTR	16	040S	050W	4301351178		Indian	Indian	OW	APD
16-19D-37 BTR	19	030S	070W	4301351179		Indian	Fee	OW	APD
6-2D-45 BTR	2	040S	050W	4301351234		Indian	Indian	OW	APD
2-2D-45 BTR	2	040S	050W	4301351235		Indian	Indian	OW	APD
10-26-35 BTR	26	030S	050W	4301351248		Indian	Fee	OW	APD
LC TRIBAL 1H-33-46	33	040S	060W	4301351257		Indian	Fee	OW	APD
LC TRIBAL 9-25D-46	25	040S	060W	4301351276		Indian	Indian	OW	APD
LC TRIBAL 8H-30-45	30	040S	050W	4301351277		Indian	Indian	OW	APD
LC TRIBAL 16H-30-45	30	040S	050W	4301351279		Indian	Indian	OW	APD
LC TRIBAL 13-30D-45	30	040S	050W	4301351282		Indian	Indian	OW	APD
LC TRIBAL 16H-36-46	36	040S	060W	4301351291		Indian	Indian	OW	APD
LC TRIBAL 13H-30-46	30	040S	060W	4301351321		Indian	Indian	OW	APD
LC TRIBAL 13H-31-46	31	040S	060W	4301351326		Indian	Indian	OW	APD
LC TRIBAL 16-31D-46	31	040S	060W	4301351328		Indian	Indian	OW	APD
LC TRIBAL 5H-26-47	26	040S	070W	4301351337		Indian	Indian	OW	APD
LC TRIBAL 5H-19-45	20	040S	050W	4301351349		Indian	Indian	OW	APD
LC TRIBAL 16-36D-47	36	040S	070W	4301351363		Indian	Indian	OW	APD
15-4D-47 BTR	4	040S	070W	4301351377		Indian	Fee	OW	APD
16-23D-46 LC TRIBAL	23	040S	060W	4301351396		Indian	Fee	OW	APD
15-2D-36 BTR	2	030S	060W	4301351419		Indian	Fee	OW	APD
16-23D-37 BTR	23	030S	070W	4301351420		Indian	Fee	OW	APD
11-9D-47 BTR	9	040S	070W	4301351422		Indian	Fee	OW	APD
15-13D-47 BTR	13	040S	070W	4301351424		Indian	Indian	OW	APD
LC TRIBAL 15-19D-46	19	040S	060W	4301351426		Indian	Indian	OW	APD
16-13D-45 BTR	13	040S	050W	4301351428		Indian	Indian	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

14-12D-45 BTR	12	040S	050W	4301351444		Indian	Indian	OW	APD
16-14D-45 BTR	14	040S	050W	4301351445		Indian	Indian	OW	APD
5-13D-45 BTR	13	040S	050W	4301351446		Indian	Indian	OW	APD
LC TRIBAL 16-26D-46	26	040S	060W	4301351450		Indian	State	OW	APD
LC TRIBAL 16-34D-46	34	040S	060W	4301351451		Indian	State	OW	APD
16-12D-45 BTR	12	040S	050W	4301351452		Indian	Indian	OW	APD
8-12D-45 BTR	12	040S	050W	4301351453		Indian	Indian	OW	APD
LC TRIBAL 1-35D-46	35	040S	060W	4301351454		Indian	Fee	OW	APD
16-25D-37 BTR	25	030S	070W	4301351455		Indian	Fee	OW	APD
LC TRIBAL 13H-29-46	28	040S	060W	4301351462		Indian	Fee	OW	APD
LC TRIBAL 14-30D-37	30	030S	070W	4301351494		Indian	Fee	OW	APD
7-13D-45 BTR	13	040S	050W	4301351497		Indian	Indian	OW	APD
LC TRIBAL 4H-35-46	35	040S	060W	4301351515		Indian	Fee	OW	APD
LC TRIBAL 13H-19-46	19	040S	060W	4301351543		Indian	Indian	OW	APD
16-26D-37 BTR	26	030S	070W	4301351598		Indian	Fee	OW	APD
LC TRIBAL 16-31D-37	31	030S	070W	4301351610		Indian	Fee	OW	APD
5-4-35 BTR	4	030S	050W	4301351613		Indian	Fee	OW	APD
LC TRIBAL 16-31D-47	31	040S	070W	4301351616		Indian	Indian	OW	APD
LC TRIBAL 13H-31-47	31	040S	070W	4301351617		Indian	Indian	OW	APD
LC TRIBAL 13-32D-47	32	040S	070W	4301351619		Indian	Indian	OW	APD
LC TRIBAL 16H-32-47	32	040S	070W	4301351620		Indian	Indian	OW	APD
LC TRIBAL 1-32D-47	32	040S	070W	4301351624		Indian	Indian	OW	APD
LC TRIBAL 4H-32-47	32	040S	070W	4301351625		Indian	Indian	OW	APD
LC TRIBAL 13-28D-47	28	040S	070W	4301351627		Indian	Indian	OW	APD
LC TRIBAL 13H-29-47	28	040S	070W	4301351628		Indian	Indian	OW	APD
LC TRIBAL 16H-28-47	28	040S	070W	4301351629		Indian	Indian	OW	APD
LC TRIBAL 1-28D-47	28	040S	070W	4301351639		Indian	Indian	OW	APD
LC TRIBAL 1H-27-47	28	040S	070W	4301351640		Indian	Indian	OW	APD
LC TRIBAL 4H-28-47	28	040S	070W	4301351641		Indian	Indian	OW	APD
LC TRIBAL 7-25D-58	25	050S	080W	4301351643		Indian	Indian	OW	APD
LC TRIBAL 6-25D-58	25	050S	080W	4301351644		Indian	Indian	OW	APD
LC TRIBAL 13H-24-58	24	050S	080W	4301351645		Indian	Indian	OW	APD
LC TRIBAL 16-24D-58	24	050S	080W	4301351646		Indian	Indian	OW	APD
LC Tribal 8-23D-46	23	040S	060W	4301351654		Indian	Fee	OW	APD
LC Tribal 16-35D-45	35	040S	050W	4301351656		Indian	Fee	OW	APD
LC Tribal 13H-35-45	35	040S	050W	4301351657		Indian	Fee	OW	APD
LC Tribal 16-36D-45	36	040S	050W	4301351658		Indian	Fee	OW	APD
LC Tribal 13H-36-45	36	040S	050W	4301351659		Indian	Fee	OW	APD
LC Tribal 5-36D-45	36	040S	050W	4301351661		Indian	Fee	OW	APD
LC Tribal 8-26D-46	26	040S	060W	4301351663		Indian	Fee	OW	APD
3-29D-36 BTR	29	030S	060W	4301351665		Indian	Fee	OW	APD



From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 5-35D-45	35	040S	050W	4301351666	Indian	Fee	OW	APD
LC Tribal 5-24D-46	24	040S	060W	4301351668	Indian	Indian	OW	APD
LC TRIBAL 6-12D-58	12	050S	080W	4301351696	Indian	Indian	OW	APD
LC TRIBAL 8-12D-58	12	050S	080W	4301351697	Indian	Indian	OW	APD
LC TRIBAL 16H-22-47	21	040S	070W	4301351700	Indian	Indian	OW	APD
5-25D-37 BTR	25	030S	070W	4301351803	Indian	Fee	OW	APD
8-3D-36 BTR	3	030S	060W	4301351804	Indian	Fee	OW	APD
14-26D-37 BTR	26	030S	070W	4301351805	Indian	Fee	OW	APD
9-4-35 BTR	4	030S	050W	4301351806	Indian	Fee	OW	APD
11-4D-35 BTR	4	030S	050W	4301351807	Indian	Fee	OW	APD
16-27D-37 BTR	27	030S	070W	4301351808	Indian	Fee	OW	APD
14-27D-37 BTR	27	030S	070W	4301351809	Indian	Fee	OW	APD
14-16D-46 BTR	16	040S	060W	4301351812	Indian	Indian	OW	APD
LC Tribal 16-35D-48	35	040S	080W	4301351847	Indian	Indian	OW	APD
LC Tribal 13H-35-48	35	040S	080W	4301351848	Indian	Indian	OW	APD
LC Tribal 13-2D-58	11	050S	080W	4301351850	Indian	Indian	OW	APD
5-13D-36 BTR	13	030S	060W	4301351862	Indian	Fee	OW	APD
5-8D-36 BTR	8	030S	060W	4301351871	Indian	Fee	OW	APD
16-1D-36 BTR	1	030S	060W	4301351872	Indian	Fee	OW	APD
8-18D-46 BTR	18	040S	060W	4301351897	Indian	Fee	OW	APD
LC Tribal 5-36D-46	36	040S	060W	4301351905	Indian	Indian	OW	APD
LC Tribal 5-26D-45	26	040S	050W	4301351907	Indian	Indian	OW	APD
14-13D-45 BTR	13	040S	050W	4301351974	Indian	Indian	OW	APD
14-34D-46 DLB	34	040S	060W	4301351975	Indian	Fee	OW	APD
LC Tribal 5-21D-45	21	040S	050W	4301352001	Indian	Indian	OW	APD
LC Tribal 8-22D-45	22	040S	050W	4301352002	Indian	Indian	OW	APD
LC Tribal 8-25D-45	25	040S	050W	4301352007	Indian	Indian	OW	APD
LC Tribal 16-25D-45	25	040S	050W	4301352008	Indian	Indian	OW	APD
LC Tribal 16-22D-45	22	040S	050W	4301352009	Indian	Indian	OW	APD
LC Tribal 16-26D-45	26	040S	050W	4301352010	Indian	Indian	OW	APD
LC Tribal 14-31D-37	31	030S	070W	4301352016	Indian	Fee	OW	APD
5-12D-45 BTR	12	040S	050W	4301352030	Indian	Indian	OW	APD
LC Tribal 9-20D-45	20	040S	050W	4301352031	Indian	Indian	OW	APD
LC Tribal 13-35D-47	35	040S	070W	4301352055	Indian	Indian	OW	APD
LC Tribal 1-23D-47	23	040S	070W	4301352057	Indian	Indian	OW	APD
9-17D-46 BTR	17	040S	060W	4301352059	Indian	Indian	OW	APD
11-18D-46 BTR	18	040S	060W	4301352060	Indian	Indian	OW	APD
9-10D-47 BTR	10	040S	070W	4301352092	Indian	Fee	OW	APD
LC Tribal 1-17D-47	17	040S	070W	4301352096	Indian	Fee	OW	APD
7-35D-37 BTR	35	030S	070W	4301352115	Indian	Fee	OW	APD
14-25D-37 BTR	25	030S	070W	4301352116	Indian	Fee	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 5-25-46	25	040S	060W	4301352126	Indian	Indian	OW	APD
8-33D-35 BTR	33	030S	050W	4301352161	Indian	Fee	OW	APD
5-4D-36 BTR	4	030S	060W	4301352175	Indian	Fee	OW	APD
7-4D-36 BTR	4	030S	060W	4301352176	Indian	Fee	OW	APD
LC Tribal 4-36D-47	36	040S	070W	4301352186	Indian	Indian	OW	APD
LC Tribal 4-22D-46	22	040S	060W	4301352944	Indian	Indian	OW	APD
LC Tribal 16-22D-46	22	040S	060W	4301352945	Indian	Indian	OW	APD
LC Tribal 11-19D-46	19	040S	060W	4301352946	Indian	Indian	OW	APD
LC Tribal 7-20D-45	20	040S	050W	4301352947	Indian	Indian	OW	APD
15-11D-35 BTR	11	030S	050W	4301353056	Indian	Fee	OW	APD
13-11D-35 BTR	11	030S	050W	4301353057	Indian	Fee	OW	APD
BTR 16-36D-37	36	030S	070W	4301353059	Indian	Fee	OW	APD
4-29D-35 BTR	30	030S	050W	4301353060	Indian	Fee	OW	APD
1-30D-35 BTR	30	030S	050W	4301353061	Fee	Fee	OW	APD
LC TRIBAL 3-23D-46	23	040S	060W	4301353066	Indian	State	OW	APD
LC Tribal 14-23D-46	23	040S	060W	4301353067	Indian	State	OW	APD
LC Tribal 13-25D-46	25	040S	060W	4301353068	Indian	Indian	OW	APD
LC Tribal 14-26D-46	26	040S	060W	4301353069	Indian	State	OW	APD
LC Tribal 5-26D-46	26	040S	060W	4301353070	Indian	State	OW	APD
LC Tribal 11-35D-45	35	040S	050W	4301353071	Indian	State	OW	APD
LC Tribal 7-35D-45	35	040S	050W	4301353072	Indian	State	OW	APD
LC Tribal 3-35D-45	35	040S	050W	4301353075	Indian	State	OW	APD
LC Tribal 14-36D-45	36	040S	050W	4301353076	Indian	State	OW	APD
LC Tribal 13-36D-45	36	040S	050W	4301353077	Indian	State	OW	APD
LC Tribal 10-36D-45	36	040S	050W	4301353078	Indian	State	OW	APD
LC Tribal 8-36D-45	36	040S	050W	4301353079	Indian	State	OW	APD
LC Tribal 6-36D-45	36	040S	050W	4301353080	Indian	State	OW	APD
LC Tribal 1-34D-46	34	040S	060W	4301353081	Indian	State	OW	APD
LC Tribal 9-27D-46	27	040S	060W	4301353082	Indian	State	OW	APD
LC Tribal 13-35D-45	35	040S	050W	4301353083	Indian	State	OW	APD
LC Tribal 8-35D-45	35	040S	050W	4301353084	Indian	State	OW	APD
LC Tribal 15-35D-45	35	040S	050W	4301353085	Indian	State	OW	APD
LC Tribal 12-25D-45	25	040S	050W	4301353122	Indian	Indian	OW	APD
LC Tribal 14-25D-45	25	040S	050W	4301353123	Indian	Indian	OW	APD
LC Tribal 10-25D-45	25	040S	050W	4301353124	Indian	Indian	OW	APD
LC Tribal 11-26-45	26	040S	050W	4301353125	Indian	Indian	OW	APD
LC Tribal 13-26D-45	26	040S	050W	4301353126	Indian	Indian	OW	APD
LC Tribal 7-31D-46	31	040S	060W	4301353127	Indian	Indian	OW	APD
LC Tribal 7-19D-45	19	040S	050W	4301353128	Indian	Indian	OW	APD
LC Tribal 5-19D-45	19	040S	050W	4301353130	Indian	Indian	OW	APD
LC Tribal 7-25D-46	25	040S	060W	4301353132	Indian	Indian	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 7-24D-46	24	040S	060W	4301353134		Indian	Indian	OW	APD
LC Tribal 14-31D-46	31	040S	060W	4301353135		Indian	Indian	OW	APD
LC Tribal 14-30D-46	30	040S	060W	4301353136		Indian	Indian	OW	APD
13-4-35 BTR SWD	4	030S	050W	4301353293		Fee	Fee	OW	APD
LC FEE 14-26D-47	26	040S	070W	4301353294		Fee	Indian	OW	APD
LC Fee 5-25D-47	25	040S	070W	4301353295		Fee	Indian	OW	APD
7-35-46 LC SWD	35	040S	060W	4301353296		Fee	Fee	OW	APD
LC Fee 1H-33-47	32	040S	070W	4301353309		Fee	Indian	OW	APD
LC FEE 14-2D-58	2	050S	080W	4301353312		Fee	Indian	OW	APD
LC FEE 13H-21-47	21	040S	070W	4301353313		Fee	Indian	OW	APD
LC Fee 16-21D-47	21	040S	070W	4301353326		Fee	Indian	OW	APD
16-7D-46 BTR	7	040S	060W	4301353328		Fee	Indian	OW	APD
LC Fee 15-26D-47	26	040S	070W	4301353331		Fee	Indian	OW	APD
LC Fee 4-24D-47	23	040S	070W	4301353332		Fee	Indian	OW	APD
LC Fee 5-34D-47	34	040S	070W	4301353333		Fee	Indian	OW	APD
LC Fee 5-35D-47	35	040S	070W	4301353334		Fee	Indian	OW	APD
13-34D-47 LC Fee	34	040S	070W	4301353337		Fee	Indian	OW	APD
14-35D-35 BTR	35	030S	050W	4301352120		Fee	Fee	OW	DRL
6-17D-46 BTR	17	040S	060W	4301351078		Indian	Indian	OW	OPS
5-34D-35 BTR	34	030S	050W	4301351187		Indian	Fee	OW	OPS
5-10D-45 BTR	10	040S	050W	4301351221		Indian	Indian	OW	OPS
5-3D-45 BTR	3	040S	050W	4301351810		Indian	Indian	OW	OPS
9-34D-35 BTR	34	030S	050W	4301352117		Fee	Fee	OW	OPS
5-35D-35 BTR	35	030S	050W	4301352118		Fee	Fee	OW	OPS
1-2D-46 BTR	2	040S	060W	4301353086		Indian	Fee	OW	OPS
7-21-46 DLB	21	040S	060W	4301333567	16526	Indian	Indian	OW	P
LC TRIBAL 1H-27-46	27	040S	060W	4301333568	18175	Indian	Fee	GW	P
7-29-46 DLB	29	040S	060W	4301333584	17603	Indian	Fee	GW	P
LC TRIBAL 12H-28-46	28	040S	060W	4301333631	18132	Indian	Indian	GW	P
LC TRIBAL 13H-21-46	21	040S	060W	4301333632	18107	Indian	Indian	GW	P
12-36-36 BTR	36	030S	060W	4301333638	16336	Indian	Fee	GW	P
5-5-46 BTR	5	040S	060W	4301333639	16542	Indian	Fee	OW	P
5-23-36 BTR	23	030S	060W	4301333642	16675	Indian	Fee	GW	P
14-29-36 BTR	29	030S	060W	4301333643	16725	Indian	Fee	OW	P
14-30-36 BTR	30	030S	060W	4301333644	16701	Indian	Fee	GW	P
7-20-46 DLB	20	040S	060W	4301333657	16584	Indian	Indian	OW	P
LC TRIBAL 5-21D-46	21	040S	060W	4301333658	18887	Indian	Indian	OW	P
5-20-46 DLB	20	040S	060W	4301333659	18750	Indian	Indian	GW	P
LC TRIBAL 13H-20-46	20	040S	060W	4301333678	17979	Indian	Indian	GW	P
14-7-46 BTR	7	040S	060W	4301333806	16890	Indian	Indian	GW	P
7-8-45 BTR	8	040S	050W	4301333820	16974	Indian	Indian	OW	P

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

1-5-45 BTR	5	040S	050W	4301333868	16931	Indian	Indian	OW	P
5-16-36 BTR	16	030S	060W	4301333970	17195	Indian	Fee	OW	P
5-29-36 BTR	29	030S	060W	4301333972	17557	Indian	Fee	OW	P
4-30-36 BTR	30	030S	060W	4301333973	17249	Indian	Fee	OW	P
7-19-46 DLB	19	040S	060W	4301334004	19018	Indian	Indian	OW	P
5-25-36 BTR	25	030S	060W	4301334021	17126	Fee	Fee	OW	P
5-4-45 BTR	4	040S	050W	4301334089	17507	Indian	Indian	OW	P
13-2-46 BTR	2	040S	060W	4301334090	18618	Indian	Indian	OW	P
2-3-45 BTR	3	040S	050W	4301334099	17932	Indian	Indian	OW	P
7-6-45 BTR	6	040S	050W	4301334100	17653	Indian	Indian	OW	P
1-9-45 BTR	9	040S	050W	4301334101	17910	Indian	Indian	OW	P
8-10-45 BTR	10	040S	050W	4301334102	17530	Indian	Indian	OW	P
7-17-45 BTR	17	040S	050W	4301334104	17933	Indian	Indian	OW	P
16-7-45 BTR	7	040S	050W	4301334111	17665	Indian	Indian	OW	P
15-18-45 BTR	18	040S	050W	4301334112	17832	Indian	Indian	OW	P
6-12-46 BTR	12	040S	060W	4301334114	17964	Indian	Indian	OW	P
5-13-46 BTR	13	040S	060W	4301334115	17833	Indian	Indian	OW	P
16-26-36 BTR	26	030S	060W	4301334132	18028	Indian	Fee	OW	P
1-23-36 BTR	23	030S	060W	4301334136	17722	Indian	Fee	OW	P
15-10-36 BTR	10	030S	060W	4301334277	17419	Indian	Fee	OW	P
14-5-46 BTR	5	040S	060W	4301350307	17624	Fee	Fee	OW	P
14X-22-46 DLB	22	040S	060W	4301350351	17604	Indian	Indian	OW	P
16-13-36 BTR	13	030S	060W	4301350372	17853	Indian	Fee	OW	P
5-33-46 DLB	33	040S	060W	4301350397	17765	Indian	Fee	OW	P
5-34-46 DLB	34	040S	060W	4301350415	17801	Indian	State	GW	P
LC FEE 12H-32-46	32	040S	060W	4301350431	18003	Fee	Fee	OW	P
1-13D-47 BTR	13	040S	070W	4301350445	18205	Indian	Fee	OW	P
16-8D-45 BTR	8	040S	050W	4301350466	18799	Indian	Indian	OW	P
7-13D-46 BTR	13	040S	060W	4301350470	18076	Indian	Indian	OW	P
14-8D-45 BTR	8	040S	050W	4301350567	18207	Indian	Indian	OW	P
14-5D-45 BTR	5	040S	050W	4301350568	18108	Indian	Indian	OW	P
16-31D-36 BTR	31	030S	060W	4301350573	18004	Indian	Fee	OW	P
5-7D-46 BTR	7	040S	060W	4301350574	18176	Indian	Indian	OW	P
LC TRIBAL 13H-33-46	34	040S	060W	4301350575	18223	Indian	State	OW	P
5-8-45 BTR	8	040S	050W	4301350607	18279	Indian	Indian	OW	P
16-6D-45 BTR	6	040S	050W	4301350610	18177	Indian	Indian	OW	P
5-18D-45 BTR	18	040S	050W	4301350611	18300	Indian	Indian	OW	P
7-26-37 BTR	26	030S	070W	4301350641	18131	Indian	Fee	OW	P
3-11D-36 BTR	11	030S	060W	4301350642	18299	Indian	Fee	OW	P
16-1D-46 BTR	1	040S	060W	4301350675	18525	Indian	Indian	OW	P
14-3-45 BTR	3	040S	050W	4301350676	18363	Indian	Indian	OW	P

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

4-17D-45 BTR	17	040S	050W	4301350687	18517	Indian	Indian	OW	P
5-6D-45 BTR	6	040S	050W	4301350688	18726	Indian	Indian	OW	P
7-7D-45 BTR	7	040S	050W	4301350689	18380	Indian	Indian	OW	P
14-10D-45 BTR	10	040S	050W	4301350754	18447	Indian	Indian	OW	P
14-9D-45 BTR	9	040S	050W	4301350755	18379	Indian	Indian	OW	P
13-16D-36 BTR	16	030S	060W	4301350757	18206	Indian	State	OW	P
5-9D-36 BTR	9	030S	060W	4301350843	18381	Indian	Fee	OW	P
16-5D-46 BTR	5	040S	060W	4301350844	18280	Fee	Fee	OW	P
5-27D-37 BTR	27	030S	070W	4301350847	18526	Indian	Fee	OW	P
7-4D-45 BTR	4	040S	050W	4301350884	18562	Indian	Indian	OW	P
2-16D-45 BTR	16	040S	050W	4301350899	18619	Indian	Indian	OW	P
16-10D-45 BTR	10	040S	050W	4301350902	18725	Indian	Indian	OW	P
5-2D-36 BTR	2	030S	060W	4301350913	18886	Indian	Fee	OW	P
13H-27-36 BTR	27	030S	060W	4301350918	18445	Indian	State	OW	P
8-16D-46 BTR	16	040S	060W	4301350953	19027	Indian	Indian	OW	P
16-16D-46 BTR	16	040S	060W	4301350956	19028	Indian	Indian	OW	P
16-9D-45 BTR	9	040S	050W	4301350962	18662	Indian	Indian	OW	P
14-31D-36 BTR	31	030S	060W	4301350973	18524	Indian	Fee	OW	P
5-10D-36 BTR	10	030S	060W	4301350978	18989	Indian	Fee	OW	P
1-32D-36 BTR	32	030S	060W	4301350979	18648	Indian	Fee	OW	P
16-12D-36 BTR	12	030S	060W	4301350980	18748	Indian	Fee	OW	P
2-18D-45 BTR	18	040S	050W	4301350991	18776	Indian	Indian	OW	P
3-1-46 BTR	1	040S	060W	4301351017	18777	Indian	Fee	OW	P
10-5-45 BTR	5	040S	050W	4301351062	18724	Indian	Indian	OW	P
12-4D-45 BTR	4	040S	050W	4301351063	18813	Indian	Indian	OW	P
1-10D-45 BTR	10	040S	050W	4301351064	18966	Indian	Indian	OW	P
16-2D-46 BTR	2	040S	060W	4301351079	18830	Indian	Indian	OW	P
9H-4-45 BTR	4	040S	050W	4301351092	18814	Indian	Indian	OW	P
12-17-45 BTR	17	040S	050W	4301351097	18984	Indian	Indian	OW	P
5-9D-46 BTR	9	040S	060W	4301351109	19313	Indian	Fee	OW	P
14-9D-36 BTR	9	030S	060W	4301351144	19004	Indian	Fee	OW	P
5-31D-36 BTR	31	030S	060W	4301351146	18691	Indian	Fee	OW	P
4-9D-45 BTR	9	040S	050W	4301351157	18883	Indian	Indian	OW	P
8-12D-46 BTR	12	040S	060W	4301351159	18911	Indian	Indian	OW	P
LC TRIBAL 16-23D-47	23	040S	070W	4301351180	18617	Indian	Indian	OW	P
14-7D-45 BTR	7	040S	050W	4301351222	18949	Indian	Indian	OW	P
5-16D-45 BTR	16	040S	050W	4301351223	18987	Indian	Indian	OW	P
4-5D-45 BTR	5	040S	050W	4301351242	18882	Indian	Indian	OW	P
LC TRIBAL 16H-19-45	19	040S	050W	4301351278	18627	Indian	Indian	OW	P
LC TRIBAL 13-19D-45	19	040S	050W	4301351280	18628	Indian	Indian	OW	P
LC TRIBAL 5-30D-45	30	040S	050W	4301351281	19448	Indian	Indian	OW	P



From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC TRIBAL 15-24D-46	24	040S	060W	4301351283	18626	Indian	Indian	OW	P
LC TRIBAL 13H-24-46	19	040S	050W	4301351289	18629	Indian	Indian	OW	P
7-16-47 BTR	16	040S	070W	4301351296	18950	Indian	Fee	OW	P
14-18D-45 BTR	18	040S	050W	4301351313	19005	Indian	Indian	OW	P
LC TRIBAL 16-30D-46	30	040S	060W	4301351320	19006	Indian	Indian	OW	P
LC TRIBAL 5-20D-45	20	040S	050W	4301351331	19449	Indian	Indian	OW	P
11-8D-46 BTR	8	040S	060W	4301351336	19314	Indian	Indian	OW	P
5-7D-45 BTR	7	040S	050W	4301351350	18951	Indian	Indian	OW	P
7-5-35 BTR	5	030S	050W	4301351599	19078	Indian	Fee	OW	P
13-5D-35 BTR	5	030S	050W	4301351600	18996	Indian	Fee	OW	P
11-5D-35 BTR	5	030S	050W	4301351601	19061	Fee	Fee	OW	P
15-5D-35 BTR	5	030S	050W	4301351602	19062	Fee	Fee	OW	P
9-5D-35 BTR	5	030S	050W	4301351609	19029	Indian	Fee	OW	P
3-5D-35 BTR	5	030S	050W	4301351638	19079	Indian	Fee	OW	P
7-8-46 BTR	8	040S	060W	4301351702	19315	Indian	Indian	OW	P
7-30-46 DLB	30	040S	060W	4301351703	18997	Fee	Indian	OW	P
3-13D-46 BTR	13	040S	060W	4301351718	18881	Indian	Indian	OW	P
2-13D-46 BTR	13	040S	060W	4301351719	18885	Indian	Indian	OW	P
12-12D-46 BTR	12	040S	060W	4301351720	18867	Indian	Indian	OW	P
10-12D-46 BTR	12	040S	060W	4301351721	18856	Indian	Indian	OW	P
11-11D-47 BTR	11	040S	070W	4301352091	19633	Fee	Fee	OW	P
7-12D-47 BTR	12	040S	070W	4301352094	19600	Indian	Fee	OW	P
5-12D-47 BTR	12	040S	070W	4301352095	19634	Indian	Fee	OW	P
14-33D-35 BTR	33	030S	050W	4301352162	19450	Indian	Fee	OW	P
16-33D-35 BTR	33	030S	050W	4301352163	19451	Indian	Fee	OW	P
14-22-46 DLB	22	040S	060W	4301333660	17604	Indian	Indian	D	PA
13H-31-36 BTR	31	030S	060W	4301350465	18485	Indian	Fee	OW	PA
16X-23D-36 BTR	23	030S	060W	4301350623	18007	Indian	State	OW	PA
8-6-45 BTR	6	040S	050W	4301350900	18561	Indian	Indian	OW	PA
13-13-36 BTR	13	030S	060W	4301350919	18364	Indian	Fee	OW	PA
7-28-46 DLB	28	040S	060W	4301333569	16460	Indian	Indian	OW	S
5-21-36 BTR	21	030S	060W	4301333641	16674	Indian	Fee	GW	S
13-26-36 BTR	26	030S	060W	4301333980	17569	Indian	Fee	OW	S
14-1-46 BTR	1	040S	060W	4301334113	18516	Indian	Indian	OW	S
16-21-36 BTR	21	030S	060W	4301334130	17721	Indian	Fee	OW	S
14-21-36 BTR	21	030S	060W	4301334131	18006	Indian	Fee	OW	S
7-16-36 BTR	16	030S	060W	4301334133	17834	Indian	Fee	OW	S
1-30-36 BTR	30	030S	060W	4301334134	17905	Indian	Fee	OW	S
16-30-36 BTR	30	030S	060W	4301334135	18005	Indian	Fee	OW	S
3-23-36 BTR	23	030S	060W	4301334137	17860	Indian	Fee	OW	S
16-16-36 BTR	16	030S	060W	4301334138	17666	Indian	Fee	OW	S

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

4-26-36 BTR	26	030S	060W	4301334139	17620	Fee	Fee	OW	S
9-11-36 BTR	11	030S	060W	4301334276	17451	Indian	Fee	OW	S
3-36-36 BTR	36	030S	060W	4301350398	17955	Indian	Fee	OW	S
7-10-36 BTR	10	030S	060W	4301350437	18052	Indian	Fee	OW	S
16-12D-46 BTR	12	040S	060W	4301350467	18051	Indian	Indian	OW	S
13H-13-46 BTR	13	040S	060W	4301350468	18208	Indian	Indian	OW	S
13-12-46 BTR	12	040S	060W	4301350469	18233	Indian	Indian	OW	S
14-8D-36 BTR	8	030S	060W	4301350612	18163	Indian	Fee	OW	S
14-7D-36 BTR	7	030S	060W	4301350613	18330	Indian	Fee	OW	S
16-9-36 BTR	9	030S	060W	4301350645	18078	Indian	Fee	OW	S
7-27-37 BTR	27	030S	070W	4301350647	18090	Indian	Fee	OW	S
16-12D-37 BTR	12	030S	070W	4301350785	18446	Indian	Fee	OW	S
14-21D-37 BTR	21	030S	070W	4301350859	18548	Indian	Fee	OW	S
10-18D-36 BTR	18	030S	060W	4301350915	18884	Indian	Fee	OW	S
5-27D-36	27	030S	060W	4301350917	18482	Indian	State	OW	S
10-36D-36 BTR	36	030S	060W	4301351005	18523	Indian	Fee	OW	S
14-6D-45 BTR	6	040S	050W	4301351158	18967	Indian	Indian	OW	S
5H-1-46 BTR UTELAND BUTTE	6	040S	050W	4301351215	18728	Indian	Indian	OW	S
5H-1-46 BTR WASATCH	6	040S	050W	4301351216	18727	Indian	Indian	OW	S
1-25D-36 BTR	25	030S	060W	4301351294	18798	Indian	Fee	OW	S
5-5D-35 BTR	5	030S	050W	4301351605	19055	Indian	Fee	OW	S
16-23-36 BTR	23	030S	060W	4301333971	17182	Indian	Fee	OW	TA
LC TRIBAL 14-23D-47	23	040S	070W	4301334022	18616	Indian	Indian	OW	TA
5-32D-36 BTR	32	030S	060W	4301350756	18328	Indian	Fee	OW	TA



October 20, 2016

Re: Bill Barrett Corporation Transfer to New Operator

Dear Ms. Medina:

Attached please find the change of operation Form 9, Form 5's and Request to Transfer APD form changing the operator from Bill Barrett Corporation to RIG II, LLC, effective 11/1/2016. Badlands Energy – Utah, LLC will be a sub-operator.

**New Operator Contact information:**

RIG II, LLC  
1582 West 2600 South  
Woods Cross, Utah 84087-0298  
Telephone: (801) 683-4245  
Fax: (801) 298-9889

Upon reviewing the attached, please contact myself with any questions at 303-312-8115.

Sincerely,

Bill Barrett Corporation

Brady Riley  
Permit Analyst

**RECEIVED**  
OCT 21 2016  
DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:  
(see attached well list)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

N/A

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:  
(see attached well list)

9. API NUMBER:

10. FIELD AND POOL, OR WILDCAT:

1. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

2. NAME OF OPERATOR:

RIG II, LLC

N4055

3. ADDRESS OF OPERATOR:

1582 West 2600 South

CITY Wood Cross

STATE UT

ZIP 84087

PHONE NUMBER:

(801) 683-4245

4. LOCATION OF WELL

FOOTAGES AT SURFACE: (see attached well list)

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ NOTICE OF INTENT  
(Submit in Duplicate)

Approximate date work will start:

11/1/2016

☐ SUBSEQUENT REPORT  
(Submit Original Form Only)

Date of work completion:

☐ ACIDIZE

☐ ALTER CASING

☐ CASING REPAIR

☐ CHANGE TO PREVIOUS PLANS

☐ CHANGE TUBING

☐ CHANGE WELL NAME

☐ CHANGE WELL STATUS

☐ COMINGLE PRODUCING FORMATIONS

☐ CONVERT WELL TYPE

☐ DEEPEN

☐ FRACTURE TREAT

☐ NEW CONSTRUCTION

☒ OPERATOR CHANGE

☐ PLUG AND ABANDON

☐ PLUG BACK

☐ PRODUCTION (START/RESUME)

☐ RECLAMATION OF WELL SITE

☐ RECOMPLETE - DIFFERENT FORMATION

☐ REPERFORATE CURRENT FORMATION

☐ SIDETRACK TO REPAIR WELL

☐ TEMPORARILY ABANDON

☐ TUBING REPAIR

☐ VENT OR FLARE

☐ WATER DISPOSAL

☐ WATER SHUT-OFF

☐ OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

RIG II, LLC IS SUBMITTING THIS SUNDRY AS NOTIFICATION THAT THE WELLS LISTED ON THE ATTACHED LIST HAVE BEEN SOLD TO RIG II, LLC BY BILL BARRETT CORPORATION EFFECTIVE 11/1/2016. PLEASE REFER ALL FUTURE CORRESPONDENCE TO THE ADDRESS BELOW.

RIG II, LLC

1582 West 2600 South

Woods Cross, Utah 84087-0298

801-683-4245

(STATE/FEE BOND # 9219529/ BLM BOND # UTB000712/ BIA BOND # LPM9224670)

BILL BARRETT CORPORATION N4165

Duane Zavala

NAME (PLEASE PRINT)

Duane Zavala

SIGNATURE

Senior Vice President -

EH&S, Government and Regulatory Affairs

RIG II, LLC

Jesse McSwain

NAME (PLEASE PRINT)

Jesse McSwain

SIGNATURE

Manager

NAME (PLEASE PRINT) Jesse McSwain

TITLE Manager

SIGNATURE

Jesse McSwain

DATE

10/20/16

(This space for State use only)

APPROVED

NOV 07 2016

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

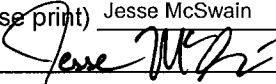
(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	(See attached list)
<b>API number:</b>	
<b>Location:</b>	Qtr-Qtr:                      Section:                      Township:                      Range:
<b>Company that filed original application:</b>	Bill Barrett Corporation
<b>Date original permit was issued:</b>	
<b>Company that permit was issued to:</b>	Bill Barrett Corporation

Check one	Desired Action:
	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> If so, has the surface agreement been updated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. <small>9219529-LUDGM / UTB000712-BLM / LPM9224670-BIA</small>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Jesse McSwain Title Manager  
Signature  Date 10/20/16  
Representing (company name) RIG II, LLC

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

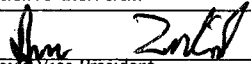
UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

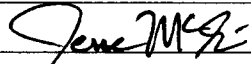
Well Name and Number <b>6-32-36 BTR SWD</b>	API Number <b>4301350921</b>
Location of Well  Footage : <b>1628 FNL 1553 FWL</b> County : <b>DUCHENSE</b>  QQ, Section, Township, Range: <b>SENW    32    3S    6W</b> State : <b>UTAH</b>	Field or Unit Name <b>CEDAR RIM</b>  Lease Designation and Number <b>2OG0005608</b>

**EFFECTIVE DATE OF TRANSFER:** 11/1/2016

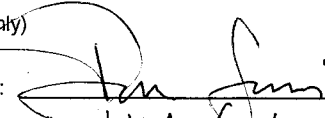
**CURRENT OPERATOR**

Company: <u>BILL BARRETT CORPORATION</u>	Name: <u>Duane Zavadii</u>
Address: <u>1099 18th Street Ste 2300</u>	Signature: <u></u>
city <u>DENVER</u> state <u>CO</u> zip <u>80202</u>	Title: <u>Senior Vice President -</u>
Phone: <u>(303) 293-9100</u>	Title: <u>EH&amp;S, Government and Regulatory Affairs</u>
Comments:	Date: <u>10/20/16</u>

**NEW OPERATOR**

Company: <u>RIG II, LLC</u>	Name: <u>Jesse McSwain</u>
Address: <u>1582 West 2600 South</u>	Signature: <u></u>
city <u>Wood Cross</u> state <u>UT</u> zip <u>84087</u>	Title: <u>Manager</u>
Phone: <u>(801) 683-4245</u>	Date: <u>10/20/16</u>
Comments:	

(This space for State use only)

Transfer approved by:   
Title: UIC Geologist

Approval Date: 11/3/16

Comments:



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

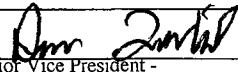
TRANSFER OF AUTHORITY TO INJECT

Well Name and Number 16-6D-46 BTR SWD	API Number 4301350781
Location of Well Footage : 0200 FSL 0099 FEL County : DUCHESNE QQ, Section, Township, Range: SESE 6 4S 6W State : UTAH	Field or Unit Name ALTAMONT Lease Designation and Number 2OG0005608

EFFECTIVE DATE OF TRANSFER: 11/1/2016

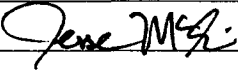
CURRENT OPERATOR

Company: BILL BARRETT CORPORATION  
Address: 1099 18th Street Ste 2300  
city DENVER state CO zip 80202  
Phone: (303) 293-9100  
Comments:


Name: Duane Zavadii  
Signature:   
Senior Vice President -  
Title: EH&S, Government and Regulatory Affairs  
Date: 10/20/16

NEW OPERATOR

Company: RIG II, LLC  
Address: 1582 West 2600 South  
city Wood Cross state UT zip 84087  
Phone: (801) 683-4245  
Comments:

Name: Jesse McSwain  
Signature:   
Title: Manager  
Date: 10/20/16

(This space for State use only)

Transfer approved by:   
Title: VIC

Approval Date: 11/3/16

Comments:

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

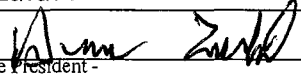
UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

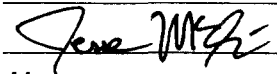
Well Name and Number <b>SWD 9-36 BTR</b>	API Number <b>4301350646</b>
Location of Well  Footage : <b>0539 FSL 0704 FEL</b>  County : <b>DUCHESNE</b>  QQ, Section, Township, Range: <b>SESE 9 3S 6W</b>  State : <b>UTAH</b>	Field or Unit Name <b>CEDAR RIM</b>  Lease Designation and Number <b>2OG0005608</b>

**EFFECTIVE DATE OF TRANSFER:** 11/1/2016

**CURRENT OPERATOR**

Company: <u>BILL BARRETT CORPORATION</u>	Name: <u>Duane Zavadi</u>
Address: <u>1099 18th Street Ste 2300</u>	Signature: <u></u>
city <u>DENVER</u> state <u>CO</u> zip <u>80202</u>	Title: <u>Senior Vice President - EH&amp;S, Government and Regulatory Affairs</u>
Phone: <u>(303) 293-9100</u>	Date: <u>10/20/16</u>
Comments:	

**NEW OPERATOR**

Company: <u>RIG II, LLC</u>	Name: <u>Jesse McSwain</u>
Address: <u>1582 West 2600 South</u>	Signature: <u></u>
city <u>Wood Cross</u> state <u>UT</u> zip <u>84087</u>	Title: <u>Manager</u>
Phone: <u>(801) 683-4245</u>	Date: <u>10/20/16</u>
Comments:	

(This space for State use only)

Transfer approved by: \_\_\_\_\_ Approval Date: \_\_\_\_\_

Title: \_\_\_\_\_

Comments:

*This well was approved by USEPA.  
EPA approval will be required.*